

**Botwinik Brothers of Mass. Inc.**  
NEW • USED • REBUILT MACHINE TOOLS  
2 Sherman Street, Worcester, Mass.  
Telephone 6-5175

THE CINCINNATI ELECTRICAL TOOL CO.

**ELECTRIC DRILLS • BUFFERS**

***The Cincinnati***

**GRINDERS • AIR MASTERS**

CINCINNATI 8, OHIO, U.S.A.



# *The Cincinnati*

TRADE MARK

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THE CINCINNATI ELECTRICAL TOOL CO.

DIVISION OF THE R. K. LeBLOND MACHINE TOOL CO.

CINCINNATI 8, OHIO

# THE CINCINNATI ELECTRICAL TOOL COMPANY



TYPE UL



TYPE ULS, UAS, UBS, UK

## 1/4-Inch Standard Duty Electric Drill

## Heavy Duty Ball Bearing Electric Drill

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

A POWERFUL, light-weight drill, suitable for use in garages, service stations, wood-working and sheet metal plants and light production works of all kinds. Streamline design for close corner work. Ball bearing on gear end of armature shaft, opposite end equipped with bronze bearing. Chuck spindle equipped with ball thrust bearing for thrust load. Gears are of special analysis alloy steel, heat-treated and run in grease-tight compartment.

EQUIPMENT — Rubber-covered three-wire cable, attachment plug and three-jaw screw back chuck.  
For extra attachments, see page 10.

THESE powerful and rugged Drills are especially adapted for automobile body work, car building and metal drilling of all kinds. Ideal drills for wood boring, and especially handy for the contractor. Equipped with high grade ball bearings on the armature shaft and ball thrust bearings on the drill spindle. Gears are of alloy steel, heat-treated, and run in grease-tight compartment. Two-pole self releasing trigger switch, with locking pin for positive operation.

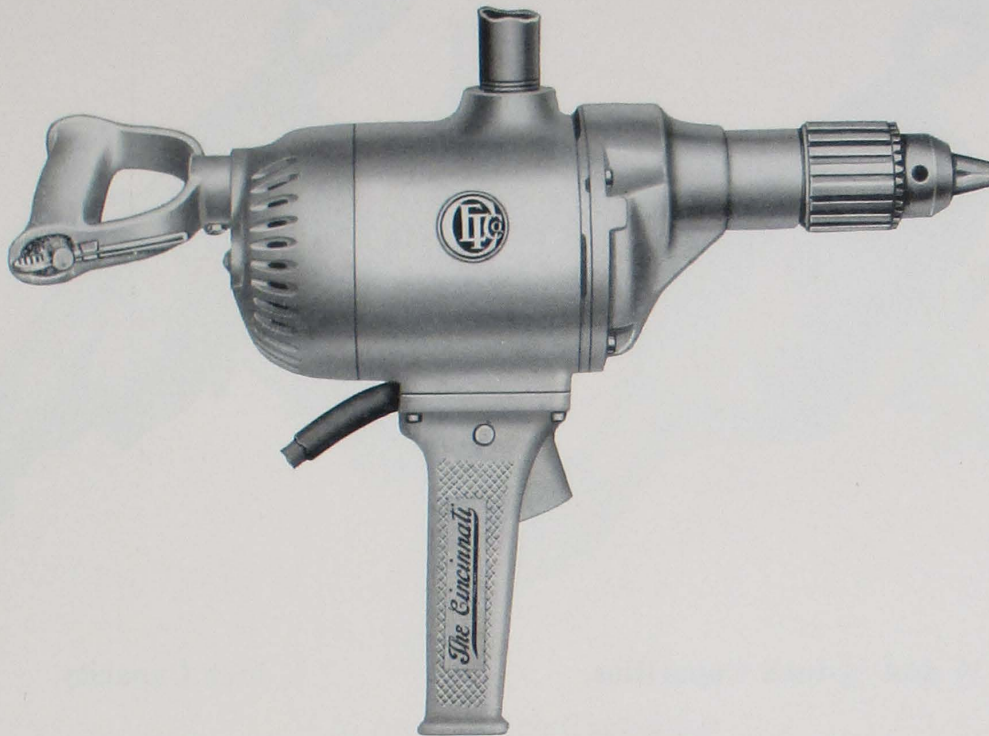
EQUIPMENT — Rubber-covered three-wire cable, attachment plug and three-jaw screw back chuck.  
For extra attachments, see page 10.

Drilling stands for above drills shown on page 7.

### SPECIFICATIONS

Type	Volts (Specify)	Drilling Capacity Steel	No Load Speed R. P. M.	Length Overall	Net Weight Pounds	Shipping Weight, Pounds	Code Word
UL	110	1/4"	2950	12"	5 1/2	6	ACE
UL	220	1/4"	2950	12"	5 1/2	6	ACID
ULS	110	1/4"	1800	12 1/2"	6	10	UHLAN
ULS	220	1/4"	1800	12 1/2"	6	10	ULNAR
UAS	110	1/4"	1600	13 1/2"	6 1/2	10	ACACIA
UAS	220	1/4"	1600	13 1/2"	6 1/2	10	ACME
UBS	110	5/16"	1400	13 3/4"	7	10	ACRE
UBS	220	5/16"	1400	13 3/4"	7	10	ACUTE
UK	110	3/8"	1200	14"	8	11	ABODE
UK	220	3/8"	1200	14"	8	11	ADDER

*The Cincinnati*  
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1/2-inch

## Standard Duty Ball-Bearing Electric Drill

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

A POWERFUL Drill, particularly adapted for Garages, Service Stations and general maintenance work in industrial plants and small shops of all kinds. An ideal tool for the electrician or general repairman. Gears are of alloy steel, heat-treated and run in grease-tight compartment. High-grade ball bearings on armature shaft. Ball thrust bearing on chuck spindle. Fully enclosed, two-pole self-releasing trigger switch, with locking pin for positive operation.

EQUIPMENT — Rubber-covered three-wire cable, attachment plug, spade handle, with chuck key holder, removable side handle and three-jaw screw back chuck.

For extra attachments, see page 10.

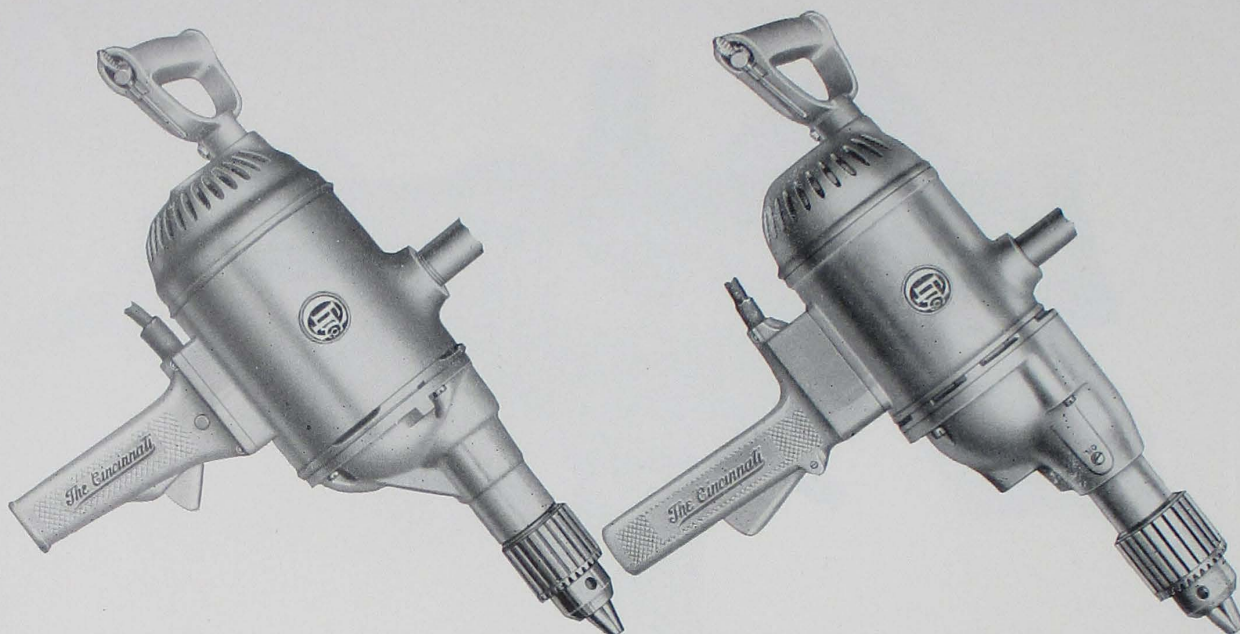
Drilling stands for above drills shown on page 7.

### SPECIFICATIONS

Type	Volts (Specify)	Drilling Capacity Steel	No Load Speed R. P. M.	Length Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
UO	110	1/2"	550	16 1/4"	14	20	ABUSE
UO	220	1/2"	550	16 1/4"	14	20	ABOUND

*The Cincinnati*  
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# THE CINCINNATI ELECTRICAL TOOL COMPANY



$\frac{3}{8}$ ,  $\frac{1}{2}$  and  $\frac{5}{8}$ -inch Capacities

$\frac{3}{4}$ -inch Capacity

## Heavy Duty Ball-Bearing Electric Drills

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

THESE Heavy Duty Drills are particularly adapted for general production work in metal-working industries of all kinds. Rugged design and exceptional power insure long and efficient service for continuous production. Gears are of alloy steel, heat-treated, and run in grease-tight compartment. High-grade ball bearings on armature shaft. Ball thrust bearing on chuck spindle. Fully enclosed, two-pole self releasing trigger switch, with locking pin for positive operation.

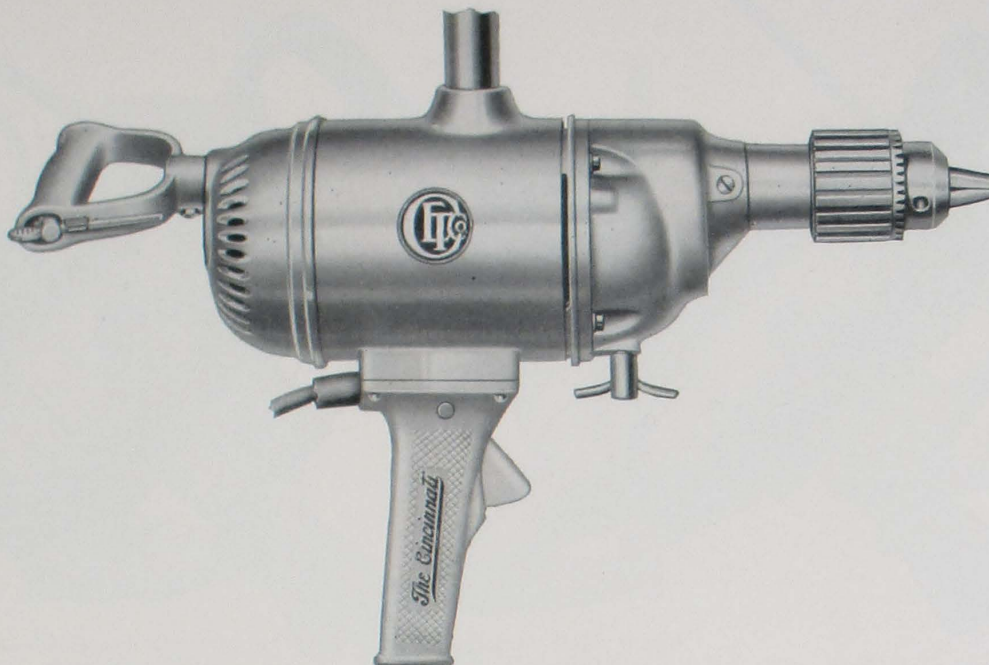
EQUIPMENT — Rubber-covered three-wire cable, attachment plug, spade handle, with chuck key holder, removable side handle and three-jaw screw back chuck.

For extra attachments, see page 10.  
Drilling stands for above drills shown on page 7.

### SPECIFICATIONS

Type	Volts (Specify)	Drilling Capacity Steel	No Load Speed R. P. M.	Length Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
UT	110	$\frac{3}{8}$ "	800	16"	14	20	ABOUT
UT	220	$\frac{3}{8}$ "	800	16"	14	20	ABSENT
UH	110	$\frac{1}{2}$ "	550	17"	17	25	ABET
UH	220	$\frac{1}{2}$ "	550	17"	17	25	ACCORD
UE	110	$\frac{5}{8}$ "	450	17 $\frac{1}{2}$ "	19	30	ABACK
UE	220	$\frac{5}{8}$ "	450	17 $\frac{1}{2}$ "	19	30	ABIDE
UW	110	$\frac{3}{4}$ "	425	21 $\frac{1}{4}$ "	28	45	AGATE
UW	220	$\frac{3}{4}$ "	425	21 $\frac{1}{4}$ "	28	45	AGENT

*The Cincinnati*  
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$\frac{1}{2}$  and  $\frac{5}{8}$ -inch Capacities

## Heavy Duty Syncro-Mesh Two Speed Drills

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

**H**USKY ball-bearing two-speed drills, the last word in portable tools for general maintenance, as well as production work, where a wide size range of drilling is required. Syncro-mesh gearing permits speed changes, while motor is running, by merely shifting speed-change lever — no clashing of gears possible.

These drills, when used in connection with the stands, as shown on page 7, have all of the advantages of a portable two-speed drill press.

Gears are of special alloy steel, heat-treated and run in grease-tight compartment. The armature is mounted on deep-groove ball bearings, with ball thrust bearing on spindle. Equipped with fully-enclosed two-pole self releasing trigger switch, with locking pin for positive operation.

**Equipment** — Rubber-covered three-wire cable, attachment plug, spade handle with chuck key holder, removable side handle and three-jaw screw back chuck.

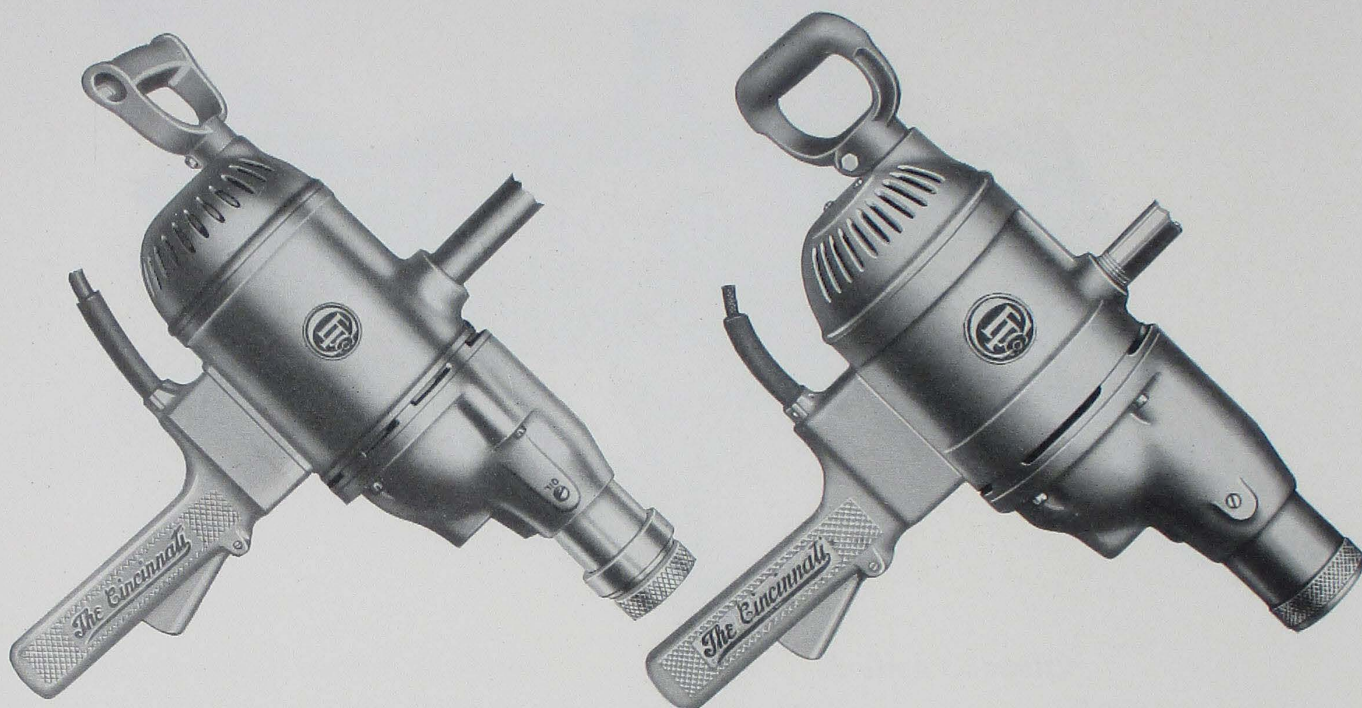
For extra attachments, see page 10.  
Drilling stands for above drills shown on page 7.

### SPECIFICATIONS

Type	Volts (Specify)	Drilling Cap. Steel	No Load Speed R. P. M.	Length Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
UD	110	$\frac{1}{2}$ "	550-800	18"	19	25	ALONG
UD	220	$\frac{1}{2}$ "	550-800	18"	19	25	ABBEY
UED	110	$\frac{5}{8}$ "	500-750	18 $\frac{1}{4}$ "	20	28	ADRIFT
UED	220	$\frac{5}{8}$ "	500-750	18 $\frac{1}{4}$ "	20	28	ADVERB

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# THE CINCINNATI ELECTRICAL TOOL COMPANY



7/8-inch Capacity

1 and 1 1/4-inch Capacities

## Heavy Duty Ball-Bearing Electric Drills

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

**P**OWERFUL, sturdy and compact heavy-duty drills, especially built for heavy drilling in structural steel boiler plate, ship-building and heavy machine-shop drilling of all kinds. Gears are of alloy steel, heat-treated and run in grease-tight compartment. Deep-groove radial ball bearings on armature shaft; ball thrust bearing on spindle.

Equipped with a fully enclosed two-pole self releasing trigger switch.

Equipment for Type UN — Rubber-covered three-wire cable, attachment plug, spade handle and removable side handle.

Equipment for Types UP and UG — Rubber-covered three-wire cable, attachment plug, spade handle and removable side handle.

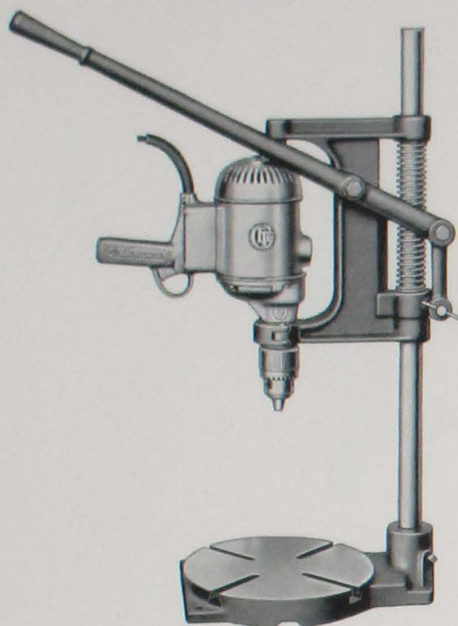
For extra attachments, see page 10.  
Drilling stands for above drills shown on page 7.

### SPECIFICATIONS

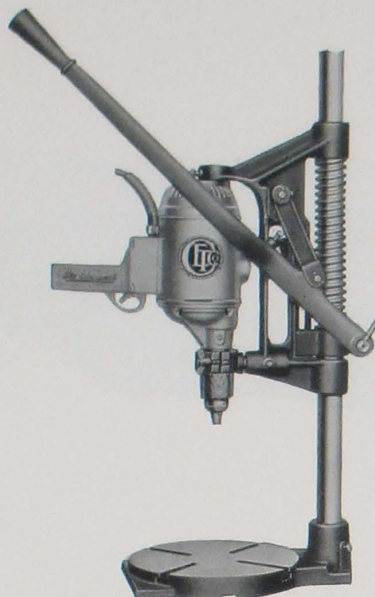
Type	Volts (Specify)	Drilling Capacity Steel	No Load Speed R. P. M.	Taper Socket	Length, Overall	Net Weight, Pounds	Shipping Weight Pounds	Code Word
UN	110	7/8"	410	No. 2	18"	25	45	LEGION
UN	220	7/8"	410	No. 2	18"	25	45	LEASE
UP	110	1"	335	No. 3	19 1/2"	32	53	UKASE
UP	220	1"	335	No. 3	19 1/2"	32	53	UMBER
UG	110	1 1/4"	290	No. 3	20"	35	55	URGE
UG	220	1 1/4"	290	No. 3	20"	35	55	USHER

*The Cincinnati*

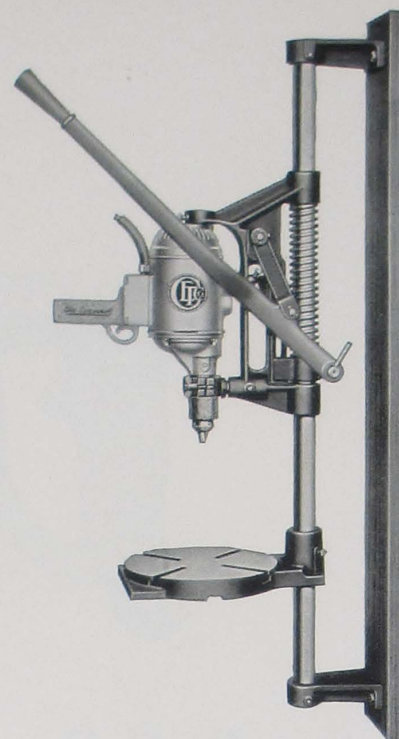
# THE CINCINNATI ELECTRICAL TOOL COMPANY



No. 12 Bench Drill Stand  
For Use With  
"The Cincinnati"  
Types UT and UO Drills only



No. 00 Bench Drill Stand  
For Use With  
"The Cincinnati" Drills  
 $\frac{1}{2}$ " to  $1\frac{1}{4}$ " Capacity  
\*SEE NOTE BELOW



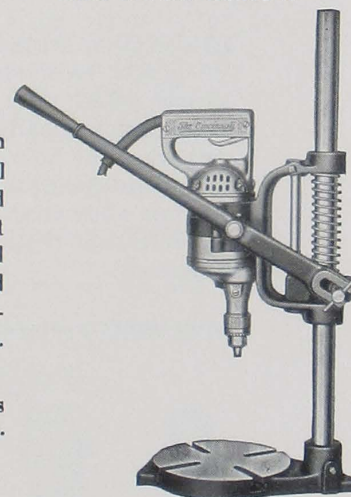
No. 00W Post Drill Stand  
For Use With  
"The Cincinnati" Drills,  
 $\frac{1}{2}$ " to  $1\frac{1}{4}$ " Capacity  
\*SEE NOTE BELOW

## Bench and Post Drill Stands

THESE Drilling Stands have been designed for use with THE CINCINNATI Electric Drills from  $\frac{1}{4}$ " to  $1\frac{1}{4}$ " capacity. The drill supporting bracket can be set at any point on the column and raised or lowered as desired. The weight of the drill and supporting bracket is counterbalanced through the spring on the column. The Electric Drill is locked or released in the bracket by means of a hinged clamp and thumb-screw (no tools required). Depth of holes to be drilled is regulated by an adjustable stop on the column. Lever feed with quick return.

\*The OO and OOW Drill Stands are furnished with one of the adaptors listed below as standard equipment. Please specify the adaptor required.

ADAPTOR "A" FOR USE WITH TYPES UT-UO  
ADAPTOR "B" FOR USE WITH TYPES UH-UE-UD-UED  
ADAPTOR "C" FOR USE WITH TYPES UW-UN  
ADAPTOR "D" FOR USE WITH TYPES UP-UG

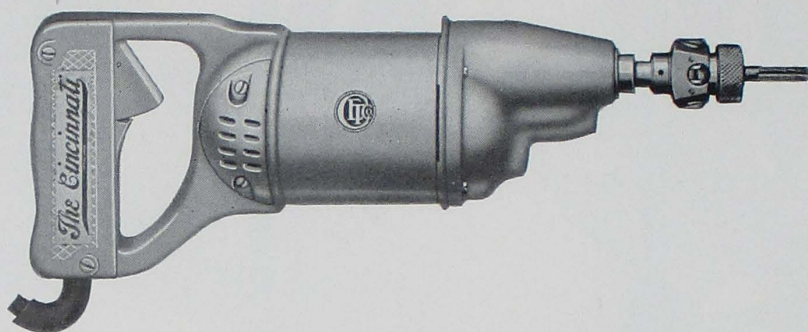


No. 10—DRILL STAND for use with  
Types ULS, UAS, UBS, UK Drills  
N1 and N2 Screw Drivers and  
UJ Tapper.  
Cannot be used with  
Type UL drill.

### GENERAL SPECIFICATIONS

	No. 10	No. 12	No. 00	No. 00W
Height of Column .....	24"	30"	38"	38"
Diameter of Column .....	$1\frac{1}{8}$ "	$1\frac{3}{16}$ "	$1\frac{1}{2}$ "	$1\frac{1}{2}$ "
Distance from Center of Column to Center of Drill Bit ..	$5\frac{3}{8}$ "	7"	7"	7"
Feed Travel .....	3"	4"	5"	5"
Maximum Distance from Base to Drill Chuck .....	14"	$13\frac{1}{16}$ "	13"	14"
Size of Base .....	7" x $10\frac{3}{4}$ "	10" x 13"	10" x 13"	8" Dia.
Net Weight .....	23 lbs.	40 lbs.	45 lbs.	60 lbs.
Shipping Weight .....	38 lbs.	60 lbs.	75 lbs.	105 lbs.
Code Word .....	RACE	RABID	RANGER	RAPIER

*The Cincinnati*  
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## *Ball-Bearing Tapping Machine*

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

**E**LECTRIC Tapper especially designed for speeding up tapping jobs in sheet metal plants, locomotive shops, ornamental iron works, car builders, also for fitting aprons, splash pans, etc., on machine tools. No reversing switch is necessary, as the chuck automatically reverses at nearly twice the forward speed with a backward pull when the hole is tapped. The armature shaft is mounted on ball bearings and a ball thrust bearing is also provided to take the thrust load. The gears are a special analysis alloy steel, heat-treated and run in a grease-tight compartment. A two-pole self-releasing trigger switch with locking pin for positive operation is standard equipment.

**EQUIPMENT**—Rubber-covered three-wire cable, attachment plug and a special chuck for holding taps.

No. 10 Bench Drill Stand as shown on page 7 can be used with this tool.

### SPECIFICATIONS

Type	Volts (Specify)	Capacity, Cast Iron	Capacity, Steel	Capacity, Brass and Alum.	Forward Speed	Reverse Speed	Length, Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
UJ	110	$\frac{3}{8}$ " Tap	$\frac{1}{4}$ " Tap	$\frac{3}{8}$ " Tap	350 R.P.M.	500 R.P.M.	14"	8 $\frac{1}{2}$	11	BADGE
UJ	220	$\frac{1}{2}$ " Tap	$\frac{1}{4}$ " Tap	$\frac{3}{8}$ " Tap	350 R.P.M.	500 R.P.M.	14"	8 $\frac{1}{2}$	11	BAGGY



TYPES N1 and N2

## Electric Screw Drivers and Nut Setters

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

A POWERFUL tool for speeding up production in manufacturing plants of all kinds wherever there are screws to be driven or nuts to set. Equipped with positive clutch on the spindle, which disengages instantly when forward pressure on the tool is relieved. The alloy steel gears are heat-treated and run in grease-tight compartment. High-grade ball bearings. Ball thrust bearing on spindle. Fully enclosed two-pole self-releasing trigger switch, with locking pin for positive operation.

N 1 is suitable for driving wood screws up to No. 12, 2" long; lag screws up to  $\frac{3}{8}$ " 3" long; nuts on bolts up to  $\frac{1}{4}$ " diameter.

N 2 is suitable for driving wood screws up to No. 16, 3  $\frac{1}{4}$ " long; lag screws up to  $\frac{3}{8}$ " 4" long; nuts on bolts up to  $\frac{3}{8}$ " diameter.

EQUIPMENT — Rubber-covered three-wire cable, attachment plug, two screwdriver bits with centering sleeves (or one socket wrench as selected).

Reversing switch for backing out screws, nuts or bolts furnished if desired. See price sheet. No. 10 Bench Drill Stand shown on page 7 can be used with Types N1 and N2.

### ACCESSORIES FOR SCREW DRIVERS AND NUT SETTERS



Screw Driver Bit



Centering Sleeve Socket Adapter for Hexagon or Square Sockets



Square Socket



Hexagon Socket

When ordering sockets, specify whether hexagon or square and give dimension across flat of nut.

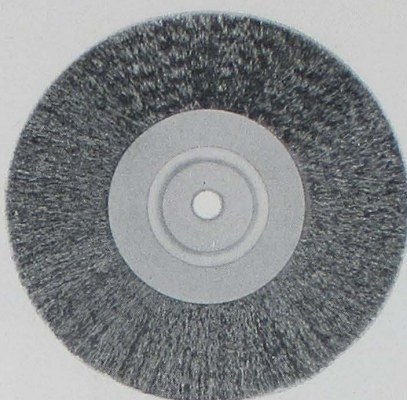
### SPECIFICATIONS

Type	Volts (Specify)	No Load Speed R. P. M.	Length, Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
N 1	110	450	13 $\frac{3}{4}$ "	7	11	NABOB
N 1	220	450	13 $\frac{3}{4}$ "	7	11	NADIR
N 2	110	370	13 $\frac{3}{4}$ "	8	12	NAG
N 2	220	370	13 $\frac{3}{4}$ "	8	12	NATIVE

# THE CINCINNATI ELECTRICAL TOOL COMPANY



**SEWED RAG BUFFING WHEELS**  
All sizes, price on application.



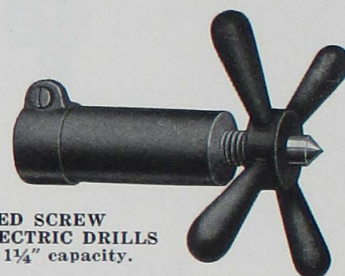
**WIRE WHEEL BRUSHES**  
All sizes, price on application.



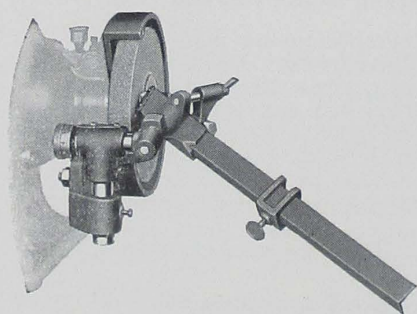
**GRINDING WHEELS**  
All sizes, price on application.



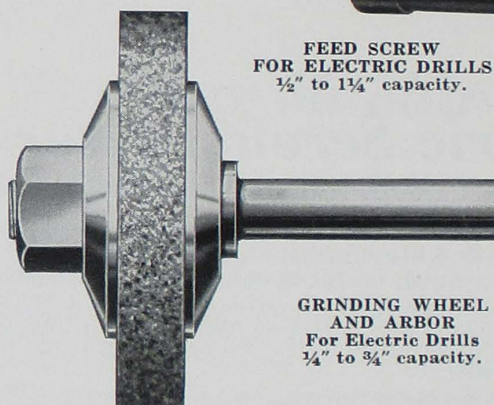
**GRINDING OUTFIT**  
For Types ULS, UAS, UBS, UK Drills.



**FEED SCREW  
FOR ELECTRIC DRILLS**  
 $\frac{1}{2}$ " to  $1\frac{1}{4}$ " capacity.



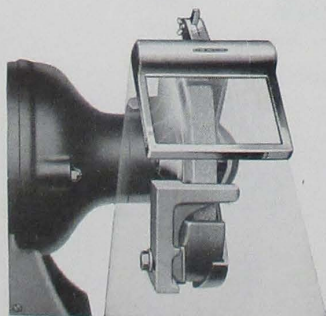
**TWIST DRILL GRINDING ATTACHMENT**  
For grinding accurately and quickly straight and taper shank twist drills up to  $1\frac{1}{4}$ " diameter. When ordering, give Type and serial number of grinder with which attachment is to be used, so that proper adaptor may be furnished. We cannot furnish adaptors for grinders, of other than our own manufacture.



**GRINDING WHEEL  
AND ARBOR**  
For Electric Drills  
 $\frac{1}{4}$ " to  $\frac{3}{4}$ " capacity.



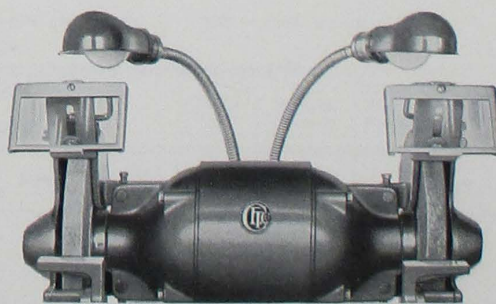
**CHUCK WITH MORSE TAPER ARBOR**  
 $\frac{1}{2}$ " chuck with No. 2 or No. 3 Arbor  
 $\frac{5}{8}$ " chuck with No. 2 or No. 3 Arbor  
 $\frac{3}{4}$ " chuck with No. 2 or No. 3 Arbor



**ILLUMINATED SHATTERPROOF  
EYE-SHIELD**



**SHATTERPROOF  
GLASS EYE-SHIELD**



**FLEXIBLE LIGHT ARM**  
Furnished singly, for small grinders or in pairs for larger units.

*The Cincinnati*

## Ball-Bearing Sanding and Polishing Machines

### Type BN 7 Inch Heavy Duty Sander

A HEAVY DUTY multi-purpose sander especially well suited for automotive body and fender repair shops, metal fabricators, etc. The natural work angle utilized in the design of this machine, reduces operator fatigue and increases efficiency. Suitable for use with the new flexible edge grinding discs. The Type BN is equipped with hardened, heat treated steel bevel gears, running in grease. LIGHT METAL housings give it more power per pound, total weight only 12 lbs.

**Standard Equipment:** 7 inch Patented, Heavy Duty Backing Pad; 10 foot 3 Conductor Cable with Plug; Reversible Side Handle, 3 assorted abrasive discs.



### Type EN 9 Inch Heavy Duty Sander

A POWERFUL, RUGGED, HIGH SPEED, INDUSTRIAL SANDER with LIGHT METAL housings. Extra large ball bearings and hardened spiral bevel gears for smooth and quiet operation. Especially suited for welding shops, foundries, machine shops, paper mills, etc. Special heavy duty motor, cooled by highly efficient fan. Comfortable rear handle with large safety trigger switch. Hand grip on gear housing for easier operation on flat grinding and sanding. **CAUTION:** In using depressed center or reinforced resinoid hub wheels, do not exceed manufacturers speed recommendations indicated on wheels.

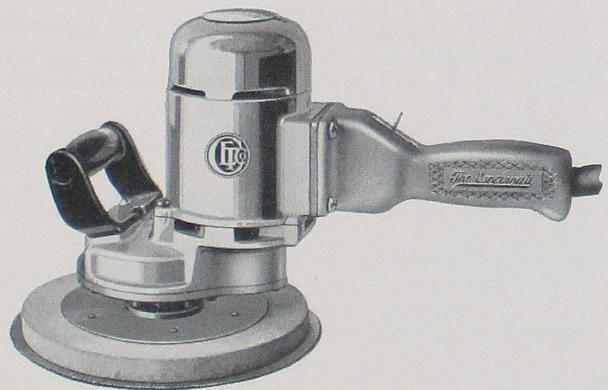
**Standard Equipment:** 7 inch or 9 inch as specified, Patented, Heavy Duty Backing Pad; 10 foot 3 conductor Cable with Plug; Removable Vent for cleaning motor; Reversible Side Handle; Positive Lock for changing discs. 3 assorted abrasive discs.



### Type HN 9 Inch Heavy Duty Sander

A HEAVY DUTY sander built for continuous service. For general sanding purposes around industrial plants. Useful for cleaning and smoothing cotton or paper calendar rolls, suction box covers, etc., in paper mills. Equipped with patented, one piece moulded backing pad to be used with any conventional abrasive disc, 9 inch diameter with 7/8 inch hole. Oversize grease sealed ball bearings throughout.

**Standard Equipment:** 9 inch Patented, Heavy Duty Backing Pad; 10 foot 3 Conductor Cable with Plug; Special Full Grip Stationary Handle. 3 assorted abrasive discs.



ADAPTORS AND GUARDS FOR DEPRESSED CENTER WHEELS CAN BE FURNISHED (SEE PRICE SHEET)

#### SPECIFICATIONS

Type	Volts (Specify)	No Load Speed R. P. M.	Diameter Abrasive Disc	Diameter Flexible Backing Pad	Net Weight, Pounds	Shipping Weight, Pounds	Code Word Specify Voltage
BN	110 or 220	5000	7"	7"	12	17	NATION
EN	110 or 220	6000	9"	7" or 9"	14	20	NEPTUNE
HN	110 or 220	3500	9"	9"	13½	19½	NOBLE

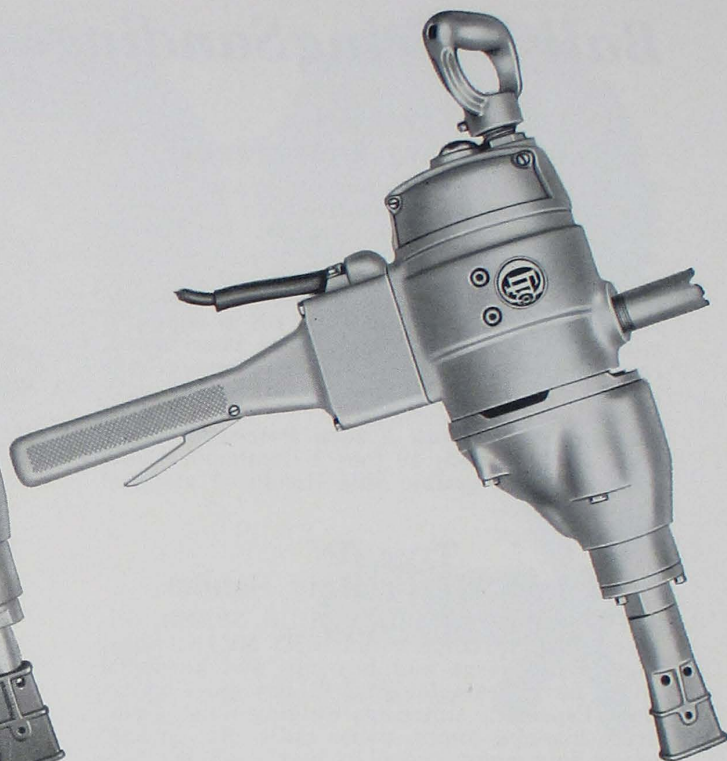
# THE CINCINNATI ELECTRICAL TOOL COMPANY



TYPE LCU

## "One-Man" Ball-Bearing Electric Coal Drills

A LIGHT-WEIGHT, powerful drill, suitable for operation by one man with or without the use of a mounting. This drill is adaptable for drilling in soft and free-drilling coal, and also in low-vein work where the working space is limited. Gears are of vanadium alloy steel, heat-treated and hardened. Armature shaft is mounted on ball bearings, with ball thrust bearing on chuck spindle to carry thrust load. Fully enclosed automatic self-releasing 2-pole switch is conveniently located in handle. A flat taper chuck is regularly provided for holding coal augers, but a square socket can be furnished, if desired. The Type LCU is equipped with universal motor for operation on either DC or AC current.



TYPES CH and GCA

## Heavy Duty Ball-Bearing Electric Coal Drills

A VERY powerful heavy duty drill, built to handle practically all shot hole drilling in both bituminous and anthracite coal; suitable for operation mounted or unmounted, by either one or two men. Gears are of vanadium alloy steel, heat-treated and hardened, and are mounted on ball bearings. The armature also runs on ball bearings, and a ball thrust bearing on the chuck spindle provides for end thrust. An automatic self-releasing 2-pole switch is conveniently located in one side handle. A flat taper chuck is regularly provided for holding coal augers, but a square socket can be furnished if desired. The Type CH Drill is furnished for operation on direct current only. The Type GCA Drill is furnished for operation on alternating three-phase current only.

EQUIPMENT — Rubber-covered three-wire cable, attachment plug, ground clamp, coal auger socket, back handle and removable side handle. Breast-plate will be furnished instead of back handle, if desired.

### SPECIFICATIONS

Type	Volts	No Load Speed, R. P. M.	Length, Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
LCU DC and AC	115	330	23 1/4"	38	65	FETLOCK
*LCU DC and AC	220 or 250	330	23 1/2"	38	65	FIDDLE
CH DC	115	500	23 3/4"	48	85	FARRAD
*CH DC	220 or 250	500	23 3/4"	48	85	FAUNA
GCA { Center } AC	220 V. 60 Cy., 3 Ph.	500	22 3/4"	65	95	FENDER
GCA { Drive } AC	440 V. 60 Cy., 3 Ph.	500	22 3/4"	65	95	FENCING

\*Specify voltage when ordering

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY

POWERFUL UNIVERSAL AIR-COOLED MOTOR 12,500 R. P. M. DYNAMICALLY BALANCED TO ELIMINATE VIBRATION. HEAVY DUTY BALL BEARINGS CORRECTLY MOUNTED INTO STEEL SLEEVES WITH INNER RACES LOCKED TO ARMATURE SHAFT.

TIGHTENING LEVER LOCKS MOTOR AT ANY POINT.

FULLY ENCLOSED 20 AMPERE SWITCH. PUSH BUTTON INDICATES "ON" AND "OFF". CABLE CONNECTED TO TERMINALS ON SWITCH BLOCK, AND CLAMPED TO ELIMINATE STRAIN.

FIFTEEN INCH DIAMETER OCTAGON GUIDE WHEEL PROVIDES CONVENIENT GRIP AT ANY POSITION. MACHINE WILL NOT ROLL ON BENCH WHEN TILTED ONTO ITS SIDE TO CHANGE BITS OR COLLARS.

REVERSIBLE CAST-IRON SHOE—ONE SURFACE IS PLAIN FOR SLIDING ON WORK OR TEMPLATE. OPPOSITE SURFACE HAS SLOT MILLED TO FIT STEEL TRACK OR BENCH GUIDE. THIS PROVIDES A QUICK SET-UP AND ACCURATE METHOD OF GUIDING ROUTER FOR STRAIGHT CUTS, FLUTING, GROOVING, ETC.

MOTOR COVER EASILY REMOVED TO INSPECT COMMUTATOR, BRUSHES OR FOR LUBRICATION.

VENTILATION INTAKE ON SIDE OF MOTOR COVER ARRANGED TO PREVENT SAWDUST ENTERING WINDINGS.

DEPTH STOP GAUGE, GRADUATED BY 1/16 THS. TO SET ROUTER BIT FOR ANY DEPTH OF CUT. A QUICK ADJUSTMENT SOLVING THE PROBLEM OF WORK REQUIRING EXTREME ACCURACY SUCH AS INLAY ROUTING, FLUTING, SUNKEN PANELS, ETC.

KNURLED HAND WHEEL OPERATES RACK AND PINION FEED TO RAISE AND LOWER MOTOR TO DESIRED POSITION. THIS PROVIDES RAPID AND POSITIVE CONTROL OF ROUTER WHEN LOWERING CUTTER INTO WORK. IDEAL FOR INLaid OR CUT-OUT ROSETTES, FLUTING, BORING, ETC.

STOP PIN RELEASE ALLOWS FREE MOVEMENT OF MOTOR IN SLIDEWAY FOR ROUTING CONCAVE OR CONVEX SURFACES.

STATIONARY GUIDE COLLARS SLIP INTO HOLDER AND ARE HELD BY SET SCREW. STEEL GUIDE COLLARS OF ANY DIAMETER CAN BE FURNISHED.

CHUCK IS MOUNTED ON ARMATURE SHAFT AND DESIGNED TO TAKE STRAIGHT SHANK BITS. THIS TYPE OF CHUCK REDUCES THE DISTANCE BETWEEN ROUTER BIT AND LOWER BEARING TO A MINIMUM.

PATENTED

## Portable Electric Router

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles

"THE CINCINNATI" Portable Electric Router now performs a multitude of operations which were formerly done at higher costs, either by hand or on expensive cumbersome machinery. Such operations include:

Stair routing, grille cutting, rosette cutting, inside shaping, fluting, paneling, splining, mortising, dove-tailing, boring, lining for two-tone work, routing for inlay work, cutting openings in slab doors, solid blinds, etc.

"THE CINCINNATI" Router is the only one providing both a rapid and positive method of lowering the cutter into the work.

No tedious depth adjustments with a rule are necessary. The adjustable stop, graduated to one-sixteenth inch, is set with a twist of the wrist. It is absolutely accurate in its action, while the scale is enlarged for easy reading.

The exceptionally high speed of 12,500 r. p. m. of "THE CINCINNATI" Router insures a clean cut in any direction, requiring no hand finishing.

"THE CINCINNATI" Portable Electric Router is furnished complete, as illustrated, with one 3/4-inch straight shank, high speed steel, 2° taper, stair routing bit, or the equivalent in standard or special bits, one each 1/4-inch and 1/2-inch split collets, for holding 1/4-inch and 1/2-inch straight shank bits, one guide collar, for 1 1/8-inch tread stock, unless otherwise ordered, two wrenches, one grinding pencil and rubber-covered cable with attachment plug.

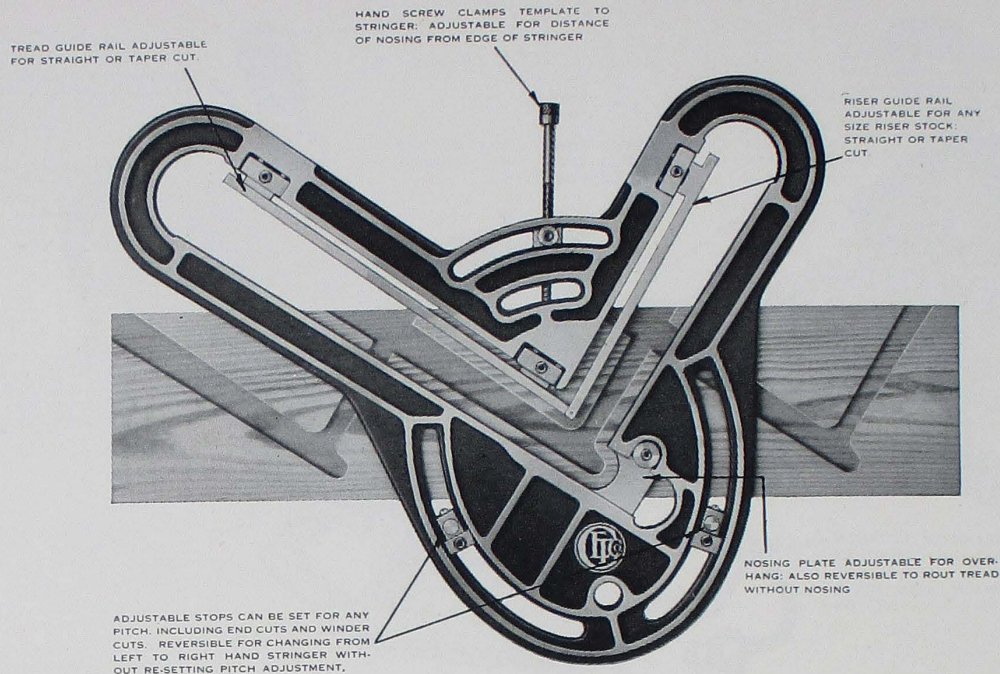
For Stair Routing Template and Accessories, see pages 14 and 15.

### SPECIFICATIONS

Type	Volts (Specify)	H.P.	Speed	Vertical Travel	Size of Base	Net Weight	Shipping Weight Pounds	Code Word
BR	110	3/4	12500	5"	9"	30	50	ALTER
BR	220	3/4	12500	5"	9"	30	50	ALUM

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



## “The Cincinnati” Stair Routing Template

“THE CINCINNATI” adjustable Stair Routing Template is designed to route stair stringers for any size tread from  $\frac{7}{8}$ -inch to 2 inches and any size riser from  $\frac{3}{4}$ -inch to  $1\frac{1}{2}$  inches, straight or taper cuts, right or left-hand, any pitch.

The nosing may be cut any distance from edge of stringer from  $\frac{1}{2}$ -inch to  $3\frac{1}{2}$  inches. The Template is furnished with a metal nosing plate, half-round and adjustable for overhangs of  $1\frac{1}{8}$  inches to  $1\frac{3}{4}$  inches. It is reversible for routing treads without nosings. The Template is also so designed that the customer can make any special nosing plates needed of hard wood, if he so desires.

The standard stair routing bits are  $\frac{3}{4}$  inches in diameter ( $2^\circ$  taper) the difference in thickness of tread being taken care of by the use of different size guide collars. With this design it is necessary to use but one size of bit or nosing plate.

Changing from left to right-hand stringer, or vice versa, is accomplished within a few seconds by merely removing the screw clamp and replacing same on opposite side of Template, as well as loosening the set screws which hold the stops and pushing the latter thru to the opposite side. It is not necessary to reset the pitch adjustment when hanging from left to right on a pair of stringers. This saves time and eliminates errors.

The combination of screw clamp and adjustable stops provide a perfect three-point bearing which rigidly holds the Template to the stringer at all times. Slippage is impossible with this design.

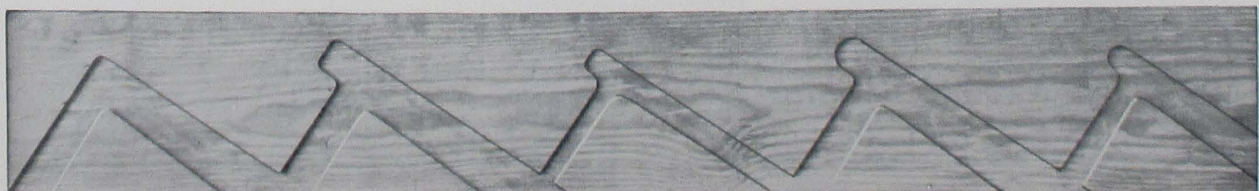
### SPECIFICATIONS

“THE CINCINNATI” Stair Routing Template is machined on both sides to secure a smooth surface and maintain uniform thickness.

Net weight .....50 lbs.  
Shipping weight .....75 lbs.  
Length riser opening .....18 inches

Length tread opening .....24 inches  
Guide rail taper adjustment... $\frac{1}{2}$ -inch in 10 inches  
Telegraphic Code Word .....Beam

Stair Stringer, showing types of nosings, risers and treads which can be made with  
“THE CINCINNATI” Router and Stair Routing Template



*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY

## Accessories for Type BR Router HIGH SPEED STEEL BITS



Straight Router Bits have  $\frac{1}{2}$ -inch diameter shank, with cutting edge  $1\frac{1}{4}$  inches long. Bits up to  $\frac{3}{4}$ -inch diameter inclusive, suitable for boring.

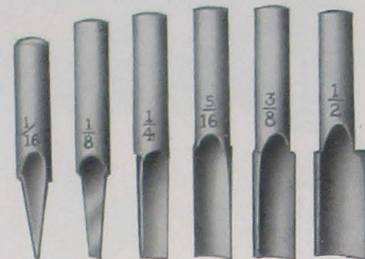
Standard sizes  
 $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{7}{8}$ ",  $1\frac{1}{8}$ ",  $1\frac{1}{4}$ ",  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ ",  $1\frac{1}{2}$ ".

Special sizes to order, prices on application.  
For bits with  $\frac{1}{2}$ " threaded shanks, for old model routers, see price sheet.



Standard  $\frac{3}{4}$ -inch Stair Routing Bit,  $2^\circ$  Taper. Not suitable for boring operations.

For bits with  $\frac{1}{2}$ " threaded shanks, for old model routers, see price sheet.



Small Inlay Bits  $\frac{1}{16}$  to  $\frac{1}{2}$ -inch by sixteenths with  $\frac{1}{4}$ -inch straight shanks. Suitable for lining, grille work, inlay work, cutout designs, light grooving, etc. (See guide collar below.)

### GUIDE COLLARS

The  $\frac{1}{4}$ -inch guide collar, furnished with "THE CINCINNATI" Router as standard equipment, is that which we have found to meet the requirements of the majority of users. However, steel guide collars can be supplied for any size tread stock from  $\frac{3}{8}$ -inch to 2 inches.

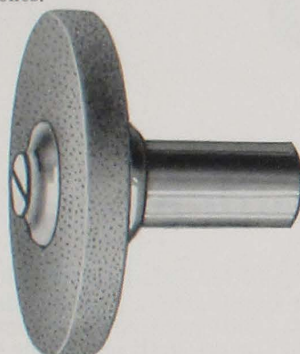
Here again we have designed from the customer's viewpoint, in so arranging the tool that he may turn his own special collars of hardwood if he so desires.



Guide Collar for use with Stair Routing Template.

For  $\frac{7}{8}$ ", 1",  $1\frac{1}{8}$ ",  $1\frac{1}{4}$ " tread stock see price sheet.

For  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ ", 2" tread stock, see price sheet.



2 x  $\frac{1}{4}$ -inch Grinding wheel with arbor. Straight fits into router chuck.



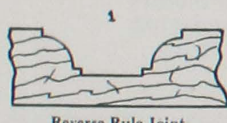
Split Collet for use with draw chuck.  $\frac{1}{4}$  and  $\frac{1}{2}$ -inch sizes furnished as standard equipment.



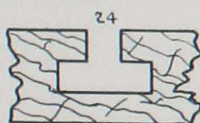
Guide Collar with  $\frac{3}{4}$ -inch tip and  $\frac{1}{2}$ -inch opening for use with  $\frac{1}{4}$ -inch shank bits.



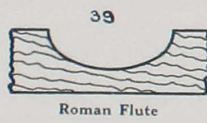
In order to obtain the best results, it is essential that bits be sharp. Grinding Pencils furnished in three sizes:  $\frac{1}{4}$ ",  $\frac{3}{8}$ ", and  $\frac{1}{2}$ -inch diameters.



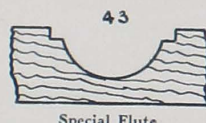
Reverse Rule Joint



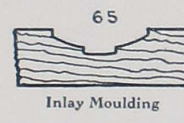
Tee Slot



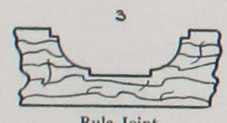
Roman Flute



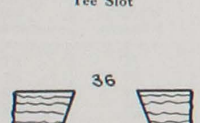
Special Flute



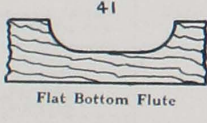
Inlay Moulding



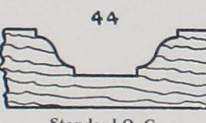
Rule Joint



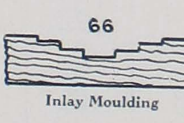
$\frac{1}{2} \times \frac{1}{2}$ -inch Dovetail



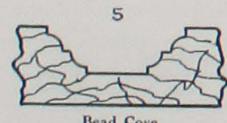
Flat Bottom Flute



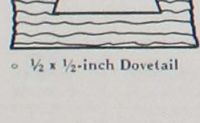
Standard O. G.



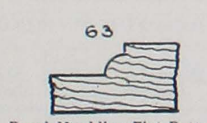
Inlay Moulding



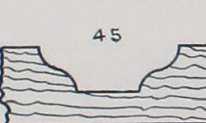
Bead Cove



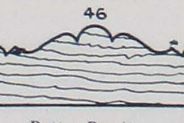
Half-Round Flute



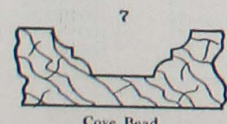
Panel Moulding Flat Bottom



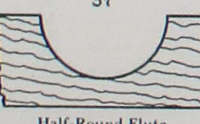
Reverse O. G.



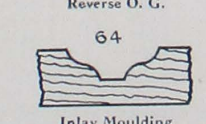
Button Rosette



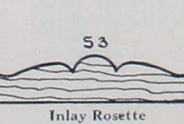
Cove Bead



Panel Moulding Flat Bottom



Inlay Moulding



Inlay Rosette

In ordering any of the above special cutters, please furnish sketch showing dimensions of cut to be made. Price on application.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



5" Grinder With  
Universal Motor



6" Grinder With  
Universal Motor



8" Grinder With  
Alternating Current Motor

## Portable Grinders

PORTABLE Ball Bearing Grinders especially adapted for grinding rough castings, welded metal, or general grinding, buffing, and sanding of all kinds where production is speeded up by taking the tool to work. Ball bearings are mounted in dust-proof housings, preventing any possibility of dirt or grit getting into the bearings. The 5" and 6" Grinders are equipped with universal motors for direct and alternating current, 25 to 60 cycles single phase or direct current. Patented overrunning clutch construction (free wheeling) eliminates vibration, gear noise and chatter, ensuring quiet and long, trouble-free performance. The 8" Grinders are equipped with motors for alternating current only. Furnished complete as illustrated with cord and plug, grinding wheel and wheel guard. Extension spring also furnished on 8" Grinder.

SPECIFICATIONS FOR 5" AND 6" GRINDERS

Type	Volts (Specify)	Speed, R. P. M.	Size Wheel	Diameter Shaft Bet. Flanges	Motor Dia. and Length Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
AH	110	4600	5"x1"	1/2"	4 1/2"x20"	17	31	GRAPE GRAVEL GALAXY GALLIC
AH	220	4600	5"x1"	1/2"	4 1/2"x20"	17	31	
NSU	110	3600	6"x1"	5/8"	5 3/8"x22 3/4"	27	42	
NSU	220	3600	6"x1"	5/8"	5 3/8"x22 3/4"	27	42	

SPECIFICATIONS FOR 8" GRINDERS

Type	Volts	H. P.	Load Speed, R. P. M.	Size Wheel	Diameter Shaft Bet. Flanges	Motor Dia. and Length Overall	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
ASA	110-60-1	1	3400	8"x1 1/2"	3/4"	7 3/4"x34"	80	125	HONAGE HOPPER HOSTAGE HAIK
†ASA	220-60-1	1	3400	8"x1 1/2"	3/4"	7 3/4"x34"	80	125	
*ARA	220-60-3	1 1/2	3400	8"x1 1/2"	3/4"	8"x35"	90	125	
*ARA	440-60-3	1 1/2	3400	8"x1 1/2"	3/4"	8"x35"	90	125	

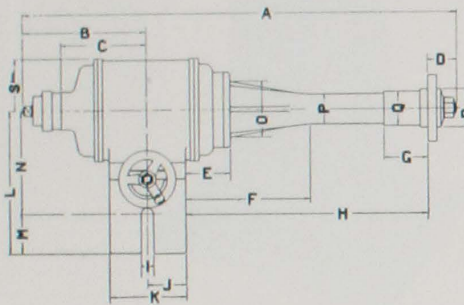
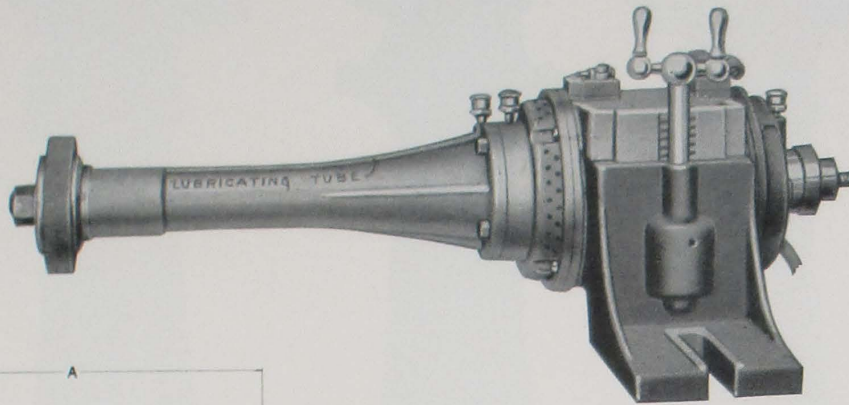
†Can also be furnished for 220, or 440 volts, 3 phase, regular list price.

For other voltage and cycles, Price on application.

\*Made in 2 or 3 phase only. If 2 phase is desired, mention after code word.  
Specify voltage cycles and phase.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
VA	24 1/8	5 7/8	3 7/8	1 3/4	2 3/4	7 1/8	2 5/8	14 7/8	1 1/8	2 1/8	4 5/8	9 1/8	2 3/8	6 3/8	3 3/8	1 1/8	2 1/8	2 1/4	3 1/8
VVA	27 7/8	6 3/8	5 3/8	2 1/8	2 3/4	8 3/8	2 5/8	14 7/8	1 3/8	2 3/8	5 1/8	10 1/8	2 1/2	7 1/8	4 1/4	2 1/8	2 1/8	2 3/4	3 1/8

\*Can be furnished with extensions giving 6' and 12' added lengths to these dimensions.

1/2 and 1 H. P.

## Internal Grinders with Vertical Feed

Alternating Current Only

Order by Type — Give Volts, Cycles and Phase

INTERNAL GRINDERS which are recommended for finishing Air, Steam or Gas Engine Cylinders; also, for dies and cylindrical work of all kinds. These tools are of the same general design as the Parallel Grinders, shown on page 45, having a vertical adjustment of about 4 3/4", and are used in the same manner.

The standard size of extension spindle is 12", but shorter or longer furnished as required; prices on application. The extension is detachable at the body of the motor and the Grinder can be used for external work.

### SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Size Wheel	Diam. Shaft Between Flanges	Length Std. Ext.	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
VA	110-60-1	1/2	3450	†5" x 1"	5/8"	12"	60	95	FRUGAL FULLNESS FUDGE FUNNEL
*VA	220-60-1	1/2	3450	†5" x 1"	5/8"	12"	60	95	
VVA	110-60-1	1	3450	†6" x 1"	3/4"	12"	90	125	
*VVA	220-60-1	1	3450	†6" x 1"	3/4"	12"	90	125	

\*Can also be furnished for 220, or 440 volts, 3 phase, regular list price.

For other voltage and cycles, Price on application.

Specify voltage cycles and phase.

†Smaller or larger diameter wheels can be furnished; min. diameter wheels, 1/2 H.P., 2"; 1 H.P., 3 1/2".

*The Cincinnati*  
TRADE MARK



## Ball-Bearing Speed Lathe

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase

**B**ALL-BEARING Speed Lathe, especially adapted for burring, reaming, counter-sinking, filing, polishing and lapping small parts of all kinds. Deep groove ball bearings are mounted in dust-proof housings and correctly locked to the motor shaft to provide end thrust and eliminate shaft wear. Switch is entirely enclosed in the base of the motor.

Furnished in practically any speed, 90 to 3400 R.P.M., to meet special applications. May be had with  $\frac{1}{2}$ " 3 jaw chuck, instead of Morse taper socket, at no additional charge; for 4" Universal 3 jaw chuck, price on application.

Also furnished in bench type, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Taper Socket	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
FBA	110-60-1	$\frac{3}{4}$	No. 2	38 $\frac{1}{4}$ "	16"x12"	150	245	VALET VAMPIRE
*FBA	220-60-1	$\frac{3}{4}$	No. 2	38 $\frac{1}{4}$ "	16"x12"	150	245	

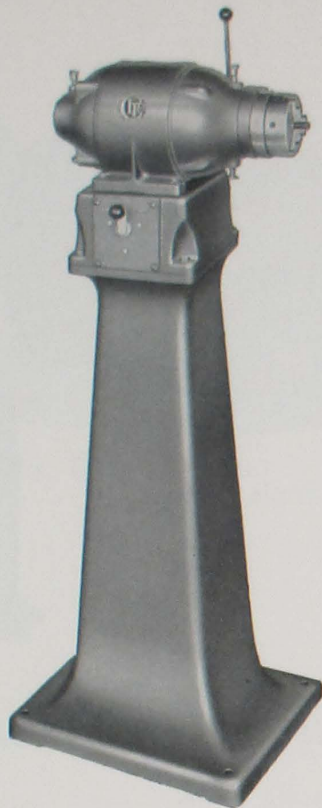
\*Can also be furnished for 220, or 440 volts, 3 phase, regular list price.  
For other voltage and cycles, Price on application.  
Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

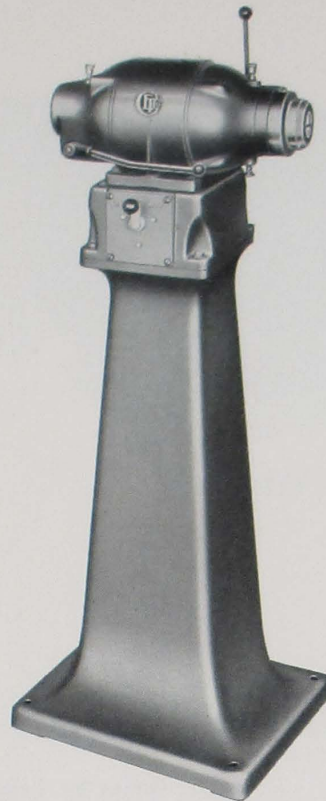
FB	115	$\frac{3}{4}$	No. 2	38 $\frac{1}{4}$ "	16"x12"	165	260	VAGRANT VAIL
FB	230	$\frac{3}{4}$	No. 2	38 $\frac{1}{4}$ "	16"x12"	165	260	

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



Types FBAB, FCAB and FDAB  
with 3 Jaw Chuck



Types FBAC, FCAC and FDAC  
with Spring Collet Chuck

## Hollow Spindle Speed Lathes

### Single or Two Speed

Furnished for Alternating Current, 2 or 3 phase, only.  
Order by Type and Volts, giving Cycles and Phase.

**H**OLLOW SPINDLE Speed Lathe, recommended for burring, lapping, polishing and finishing dies, gears, screw machine and small parts of all kinds. Furnished with either 3 jaw universal or spring-type collet chucks, as required. The hollow spindle construction makes this tool especially adaptable to tubing and bar stock, in a wide range of sizes. The special alloy steel spindle is mounted on oversize ball bearings, in dust-proof housings. A double row ball bearing, on the chuck end of the spindle, carries both radial and thrust loads. Grease cups afford proper lubrication. A combination starting switch and spindle brake, effect great time-saving. The brake shoe is adjustable to wear. A drum controller, conveniently mounted in the base, is provided for quick speed change, in the two-speed lathes. A spindle locking device facilitates the mounting or removal of the chuck.

Also furnished in bench type, see price sheet.  
Size of bench base, 9" x 10"; height to center of spindle 9".

#### SPECIFICATIONS

Equipped with Universal 3 Jaw Chuck.

A 4" 3 jaw chuck is standard equipment, but 5" or 6" chucks can be furnished, prices on application.

Type	Voltage	H. P. and Speeds R. P. M.	Diameter Hole in Spindle	Height to Center of Spindle	Size of Base at Bottom	Net Weight Pounds	Shipping Weight Pounds	Code Word
FBAB	220-440	$\frac{1}{8}$ - 560 $\frac{1}{4}$ - 1150	1"	41"	16 x 12	195	300	VENT VENUE VERGE
FCAB	220-440	$\frac{1}{8}$ - 850 $\frac{1}{4}$ - 1750	1"	41"	16 x 12	195	300	
FDAB	220-440	$\frac{1}{4}$ - 1750 $\frac{1}{2}$ - 3450	1"	41"	16 x 12	195	300	

#### Equipped with Spring Collet Chuck

FBAC	220-440	$\frac{1}{8}$ - 560 $\frac{1}{4}$ - 1150	$\frac{3}{4}$ "	41"	16 x 12	195	300	VIEW VIGIL VILLA
FCAC	220-440	$\frac{1}{8}$ - 850 $\frac{1}{4}$ - 1750	$\frac{3}{4}$ "	41"	16 x 12	195	300	
FDAC	220-440	$\frac{1}{4}$ - 1750 $\frac{1}{2}$ - 3450	$\frac{3}{4}$ "	41"	16 x 12	195	300	

Standard equipment consists of one collet, as selected, up to 1" round or  $\frac{7}{8}$ " hex; specify size desired.

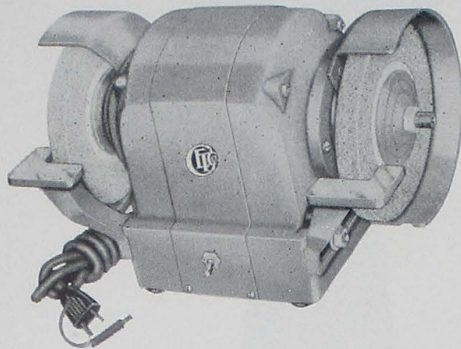
Additional collets furnished on order, see price sheet.

All of above lathes may be had in single speeds and H.P.'s as follows:  $\frac{1}{8}$  H.P. at 570 R.P.M.;  $\frac{1}{4}$  H.P. at 1150 R.P.M.;  $\frac{1}{2}$  H.P. at 1725 R.P.M.;  $\frac{3}{4}$  H.P. at 3450 R.P.M., at no additional cost.

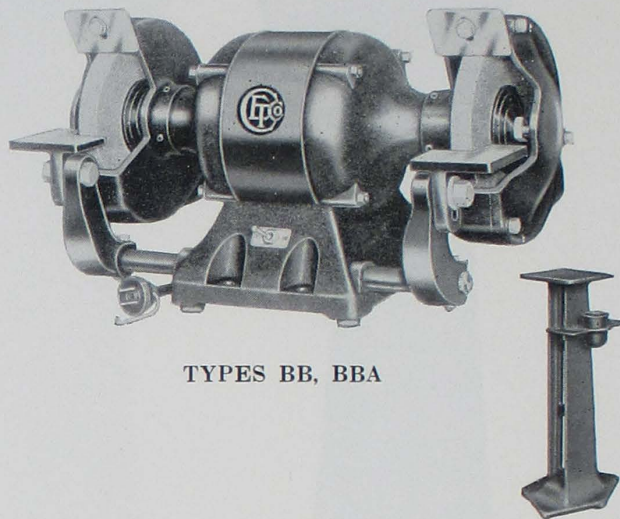
Specify voltage cycles and phase.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



TYPE KEA



TYPES BB, BBA

PEDESTAL  
FOR TYPE  
BB & BBA

## 6-Inch Bench and Pedestal Grinders

Order by Type and Volts, Giving Cycles and Phase.

**B**ALL-BEARING Grinders especially designed to meet the demand for practical and serviceable tools for use in garages, repair shops, tool-rooms, etc., for grinding small tools and light castings; also for polishing and buffing. Ball bearings are mounted in dust-proof housings in close proximity to the grinding wheels. The bearings are correctly locked to the shaft to provide end thrust and eliminate wear. A toggle switch is entirely enclosed in the base of the motor. Shatter-proof glass eye shields, flexible light arms and twist drill grinding attachment furnished as extras.

**EQUIPMENT**—Two grinding wheels, wheel guards and grinding rests. Rubber-covered cable with attachment plug, furnished on single phase and direct current Grinders only.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Diameter of Shaft Between Flanges	Distance Bet. Wheels and Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
KEA—Bench	115-60\50-1	$\frac{1}{4}$	3450-2800	6"x $1\frac{1}{2}$ "	$\frac{1}{2}$ "	9 $\frac{3}{4}$ "x 4 $\frac{1}{2}$ "	6 $\frac{1}{4}$ "x 6 $\frac{3}{4}$ "	32	35	<b>FROST FAITH FATE SERVE SANDY</b>
BBA—Bench	115-60\50-1	$\frac{1}{2}$	3450-2800	6"x $3\frac{3}{4}$ "	$\frac{1}{2}$ "	13"x 7 $\frac{3}{4}$ "	8"x 7"	55	60	
*BBA—Bench	220-60\50-1	$\frac{1}{2}$	3450-2800	6"x $3\frac{3}{4}$ "	$\frac{1}{2}$ "	13"x 7 $\frac{3}{4}$ "	8"x 7"	55	60	
PBA—Pedestal	115-60\50-1	$\frac{1}{2}$	3450-2800	6"x $3\frac{3}{4}$ "	$\frac{1}{2}$ "	13"x38"	16" x12"	115	170	
*PBA—Pedestal	220-60\50-1	$\frac{1}{2}$	3450-2800	6"x $3\frac{3}{4}$ "	$\frac{1}{2}$ "	13"x38"	16" x12"	115	170	

\*Can also be furnished for 220 or 440 volts, 2 or 3 phase, regular list price.

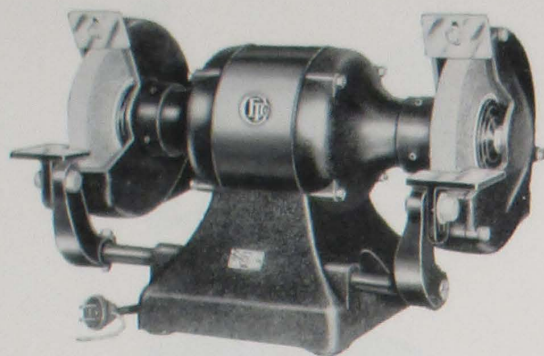
Type KEA can also be furnished for 220 volts, 50 or 60 cycles, single phase (Add 10% to list price). Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

BB —Bench	115-230	$\frac{1}{2}$	3450-2800	6"x $3\frac{3}{4}$ "	$\frac{1}{2}$ "	13"x6"	7"x8"	55	70	<b>FATAL SPACE</b>
PB —Pedestal	115-230	$\frac{1}{2}$	3450-2800	6"x $3\frac{3}{4}$ "	$\frac{1}{2}$ "	13"x38"	16"x12"	125	180	

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY



7" 1/2 H.P. Grinder



8" 3/4 H.P. Grinder



Pedestal For  
7" & 8" Grinders

## 7 and 8-Inch Bench and Pedestal Grinders

A STURDY group of Ball Bearing Grinders engineered and designed to increase production efficiency. Equipped with fully enclosed motors and Ball Bearings mounted in dust proof housings, these Grinders have proven indispensable in shops of every description.

**EQUIPMENT**—Two grinding wheels, wheel guards and grinding rests. Rubber-covered cable with attachment plug, furnished on single phase and direct current Grinders only.

7" Grinders equipped with cast iron guards and exhaust connections.

8" Grinders equipped with structural steel guards. To furnish exhaust guards on 8" Grinders, \$5.00 extra.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed, R.P.M.	Wheel Size	Diameter of Shaft Between Flanges	Distance Bet. Wheels and Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
*KSA—Bench.	110-60-1	1/2	3450	7" x 1"	5/8"	15 1/4" x 7 3/4"	9" x 10 1/4"	78	90	GULF GUTTER GUY GYPSY
*KPA—Peds'l.	110-60-1	1/2	3450	7" x 1"	5/8"	15 1/4" x 39 1/4"	12" x 16"	155	200	
*VHA—Bench.	110-60-1	3/4	3450	8" x 1"	5/8"	16" x 7 1/2"	9" x 10"	85	120	
*VPA—Peds'l.	110-60-1	3/4	3450	8" x 1"	5/8"	16" x 38"	12" x 16"	165	200	

\*Can also be supplied for 220-60 cycle single phase, 220-440-550 volts, 60 cycle, 3 phase, regular list price. Specify voltage cycles and phase.

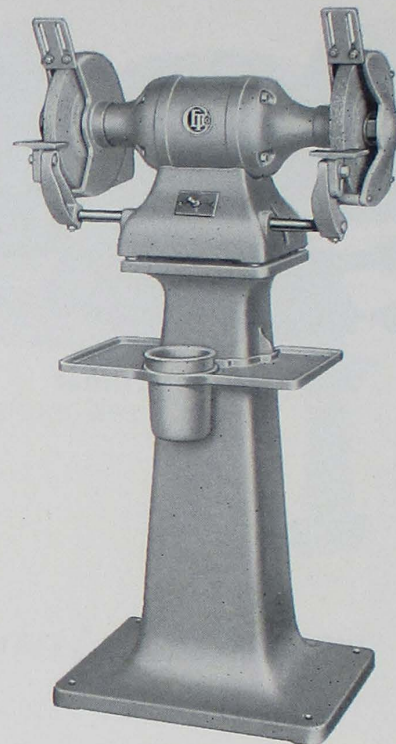
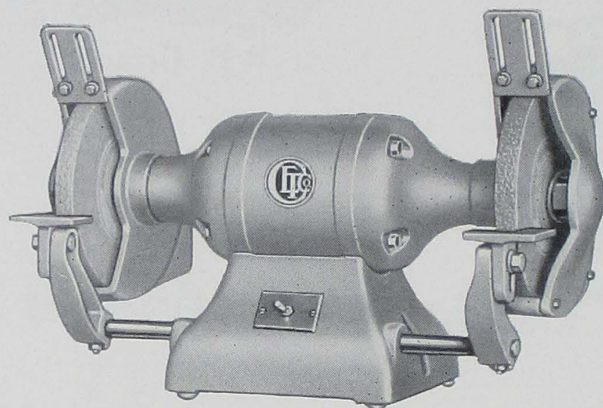
### DIRECT CURRENT SPECIFICATIONS

†KS —Bench.	115 D.C.	1/2	3450	7" x 1"	5/8"	15 1/4" x 7 3/4"	9" x 10 1/4"	78	90	GUSH GUZZLE
†KP —Peds'l.	115 D.C.	1/2	3450	7" x 1"	5/8"	15 1/4" x 39 1/4"	12" x 16"	155	200	

†Can also be supplied for 230 volts, regular list price. 250 volts, 10% extra.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



## 10 Inch Economy

### *Bench and Pedestal Grinders*

A SPECIALLY designed Grinder rigid in construction and well balanced, featuring economy and durability. An exceptional value, this Grinder is furnished COMPLETE with grinding wheels, fully enclosed safety wheel guards with exhaust outlets and all angle adjustable Tool rests. Ball Bearings are mounted in dust proof housings in close proximity to grinding wheels. Switch is enclosed in base of motor.

EQUIPMENT—Two grinding wheels, wheel guards and grinding rests. Rubber-covered cable with attachment plug, furnished on single phase grinders only.

#### ALTERNATING CURRENT SPECIFICATIONS

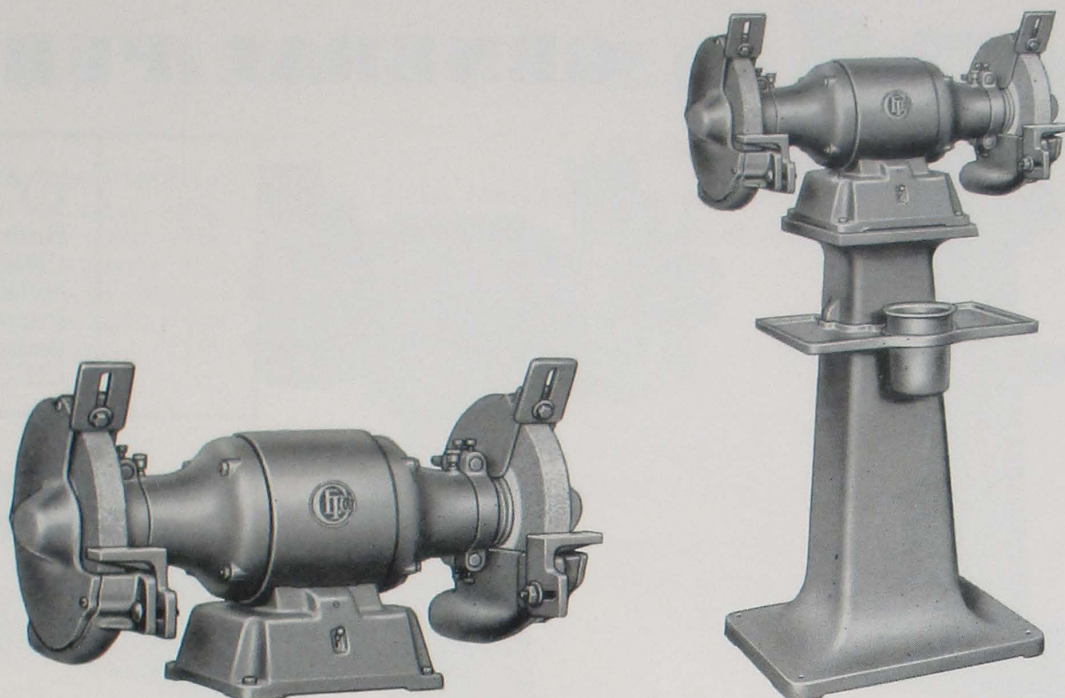
Type	Volts	H. P.	Load Speed, R.P.M.	Wheel Size	Diameter of Shaft Between Flanges	Distance Bet. Wheels and Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
KOA —Bench	110-60-1	1	1750	10" x 1"	3/4"	20" x 11 1/2"	10" x 11"	150	185	LAMP
*KOA —Bench	220-60-1	1	1750	10" x 1"	3/4"	20" x 11 1/2"	10" x 11"	150	185	LATCH
KOAP—Pedestal	110-60-1	1	1750	10" x 1"	3/4"	20" x 43 1/2"	15" x 20"	240	310	LEMON
*KOAP—Pedestal	220-60-1	1	1750	10" x 1"	3/4"	20" x 43 1/2"	15" x 20"	240	310	LOTUS

\*Can also be furnished for 220, 440 or 550 volts, 2 or 3 phase, regular list price.  
Speed for 25 cycles, 1500 R.P.M.  
Furnished for alternating Current only.  
Specify voltage cycles and phase.

*You should have an AIR MASTER with this Tool, see page 46.*

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



8 and 10 Inch

## Heavy-Duty Bench and Pedestal Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**HEAVY-DUTY GRINDERS**, designed to take care of heavy grinding of all kinds and for general purpose buffing and polishing. Ball bearings are mounted in dust-proof housings in closest proximity to grinding wheels. Spindle is of nickel steel and extra heavy. Wheel guards are safety type, equipped with spark breakers, end covers, exhaust connections. Grinding rests are adjustable. Two-pole starting switch is entirely enclosed in the base of the motor. Shatter-proof glass eye shields, flexible light arms and twist drill grinding attachment furnished as extras, see page 10.

**EQUIPMENT**—Two grinding wheels, wheel guards and grinding rests. Rubber-covered cable with attachment plug, furnished on single phase and direct current grinders only.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Diameter Shaft Bet. Flanges	Dist. Bet. Wheels and Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
BHA-Bench	110-60-1	$\frac{3}{4}$	3400	8' x 1'	$\frac{5}{8}$ "	18" x 7 $\frac{1}{4}$ "	10' x 9'	120	160	FLORAL
*BHA-Bench	220-60-1	$\frac{3}{4}$	3400	8' x 1'	$\frac{5}{8}$ "	18" x 7 $\frac{1}{4}$ "	10' x 9'	120	160	FLORET
FHA-Peds'l	110-60-1	$\frac{3}{4}$	3400	8' x 1'	$\frac{5}{8}$ "	18" x 39"	16' x 12'	210	315	HANSON
*FHA-Peds'l	220-60-1	$\frac{3}{4}$	3400	8' x 1'	$\frac{5}{8}$ "	18" x 39"	16' x 12'	210	315	HANDY
BOA Bench	110-60-1	1	1750	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{3}{8}$ " x 8"	10' x 10'	170	220	FLUID
*BOA Bench	220-60-1	1	1750	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{3}{8}$ " x 8"	10' x 10'	170	220	FLUKE
FOA Peds'l	110-60-1	1	1750	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{3}{8}$ " x 39"	20' x 15'	350	415	HAMMER
*FOA Peds'l	220-60-1	1	1750	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{3}{8}$ " x 39"	20' x 15'	350	415	HAWSER

\*Can also be furnished for 220, 440 or 550 volts, 2 or 3 phase, regular list price.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

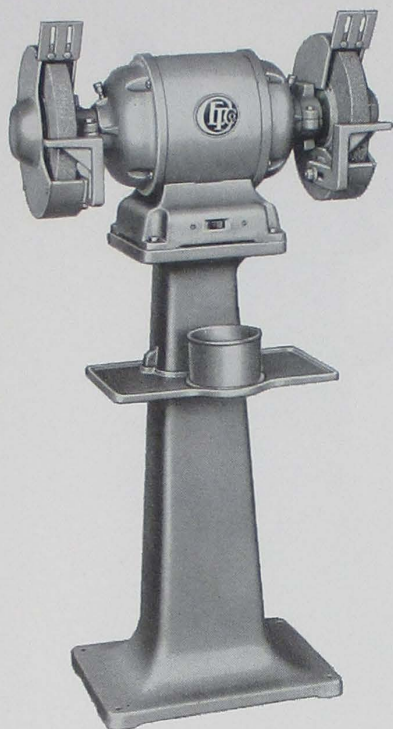
BO Bench	115	1	1700	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{1}{16}$ " x 8"	10' x 10'	170	235	FLATTER
†BO Bench	230	1	1700	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{1}{16}$ " x 8"	10' x 10'	170	235	FLEXIBLE
FO Peds'l	115	1	1700	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{1}{16}$ " x 39"	20' x 15'	350	415	GLAZE
†FO Peds'l	230	1	1700	10' x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	20 $\frac{1}{16}$ " x 39"	20' x 15'	350	415	GRAND

†Can also be supplied for 250 volts, regular list price.

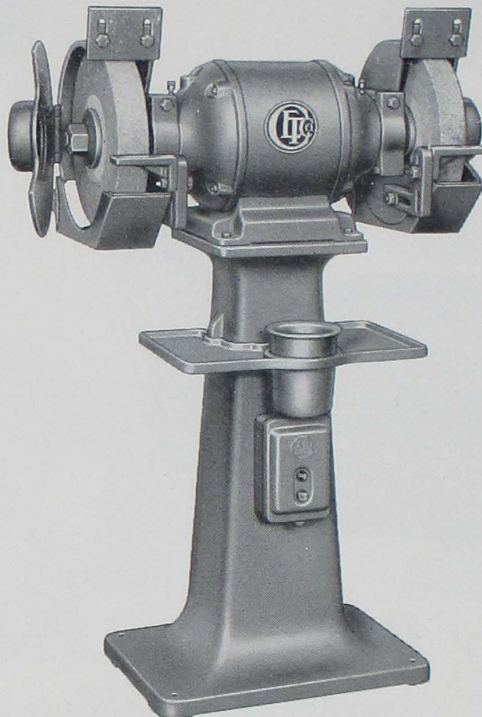
You should have an **AIR MASTER** with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



1 H. P. GRINDER  
for 10" x 1 1/4" Wheels  
Type BPOA—Bench Grinder  
Type GPOA—Pedestal Grinder



2, 3, and 5 H. P.  
PEDESTAL GRINDERS  
Type GPTA—2 H. P. for 12" x 2" Wheels  
Type GPCA—3 H. P. for 14" x 2 1/2" Wheels  
Type GPEA—5 H. P. for 14" x 3" Wheels  
Also furnished in bench type, see price sheet.

OFFERING a Quality yet priced no higher Built to the same high CINCINNATI Line since styles to meet Industry's Purpose Grinders and B dollar value on the market CINCINNATI.



1, 2, 3 and 5 H. P.  
WIDE SPREAD FOUR  
BUFFING AND POLISHING  
Type GPAA—1 H.  
Type GPBA—2 H.  
Type GPFA—3 H.  
Type GPGA—5 H.  
Also furnished in bench type, see price sheet.

## SPECIFICATIONS

Type	H.P.	Speed R. P. M.	Wheel Size Recom- mended Inches	Dia. Shaft Between Flanges Inches	Distance Between Wheels Inches	Height to Center of Spindle Inches	Net Weight Pounds	Shipping Weight Pounds	*Code Word
BPOA	1	1750	10x1 1/4	7/8	17 1/2	8	170	225	PANEL
GPOA	1	1750	10x1 1/4	7/8	17 1/2	39 1/2	275	350	PENCIL
GPTA	2	1750	12x 2	1 1/4	21	39	400	490	PATCH
GPCA	3	1750	14x2 1/2	1 1/4	24	39	415	510	PECAN
GPEA	5	1750	14x3	1 1/4	27 1/4	39	460	550	PEPPER
GPQA	3/4	3400	8x1	5/8	24 3/4	39 1/2	215	310	PROBATE
GPRA	1	1750	10x1 1/4	7/8	27	39 1/2	290	365	PICKET
GPFA	2	1750	12x2	1 1/4	36	39	400	500	PLANE
GPVA	3	1750	14x2 1/2	1 1/4	33 1/2	39	430	530	POCKET
GPWA	5	1750	14x3	1 1/4	34	39	460	560	POISON
GPJA	3/4	1750		5/8	23	39 1/2	205	305	PROFESS
GPDA	1	or		7/8	25	39 1/2	275	350	POSTER
GPKA	2	3450		1 1/4	29	39	350	450	PRINCE
GPLA	3			1 1/4	29 1/2	39	375	475	PUDDLE
GPMA	5			1 1/4	30	39	400	500	PULSE
GPFA	3/4	Please Specify which Speed desired		5/8	32 3/4	39 1/2	230	330	PROMOTE
GPAA	1			7/8	37	39 1/2	300	375	PUPPET
GPBA	2			1 1/4	46	39	450	525	POLISH
GPFA	3			1 1/4	46 1/2	39	475	550	POPLAR
GPGA	5			1 1/4	47	39	500	575	PRODUCT

\*Specify volts, cycles and phase after code word.

## MOTOR STANDARDS

FURNISHED for Alternating Current 1 H. P. Grinders and Buffers are furnished for operation on 110, 220, 440 or 550 volts, 50 or 60 cycles single phase (re induction motors) or 220, 440 or 550 volts, 50 or 60 cycles, 2 or 3 phase; 2, 3 and 5 H. P. units for operation on 220, 440 or 550 volts, 50 or 60 cycles, 2 or 3 phase. 3/4 H. P. units for 110 or 220 volts, 50 or 60 cycles, single phase (capacitor start motor) or 220, 440 or 550 volts, 50 or 60 cycles, 2 or 3 phase. Always specify voltage, cycles and phase.

*The Cincinnati*

## GRINDERS AND BUFFERS

Ball Bearing Grinders and Buffers, many inferior and ordinary tools. Grinders which have characterized THE CINCINNATI are supplied in a variety of sizes and types to meet the needs, THE CINCINNATI General represents the utmost in dollar for day. Play safe — specify — THE

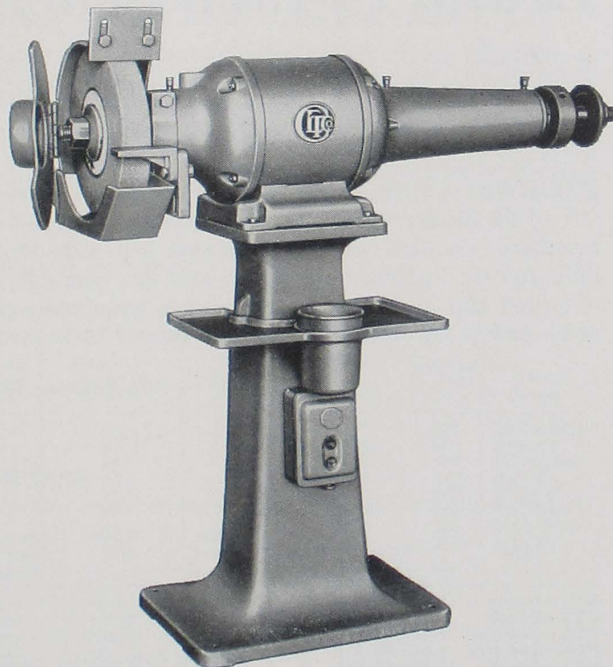
### CHECK THESE FEATURES:

- Fully enclosed adjustable wheel guards of structural steel.
- All wheel guards equipped with exhaust connections.
- Fully enclosed motors.
- Sealed type ball bearings.
- $\frac{3}{4}$  and 1 H.P. machines equipped with heavy duty toggle switch.
- All machines over 1 H.P. equipped with push button starter with overload protection.
- Extra heavy pedestal — large tool tray and water pot.

GRINDING WHEELS NOT FURNISHED AS STANDARD EQUIPMENT, BUT CAN BE SUPPLIED ON ORDER.



1, 2, 3 and 5 H. P.  
**EXTENDED SPINDLE BUFFERS**  
Type GPJA— $\frac{3}{4}$  H. P.  
Type GPDA—1 H. P.  
Type GPKA—2 H. P.  
Type GPLA—3 H. P.  
Type GPMA—5 H. P.  
Also furnished in bench type, see price sheet.

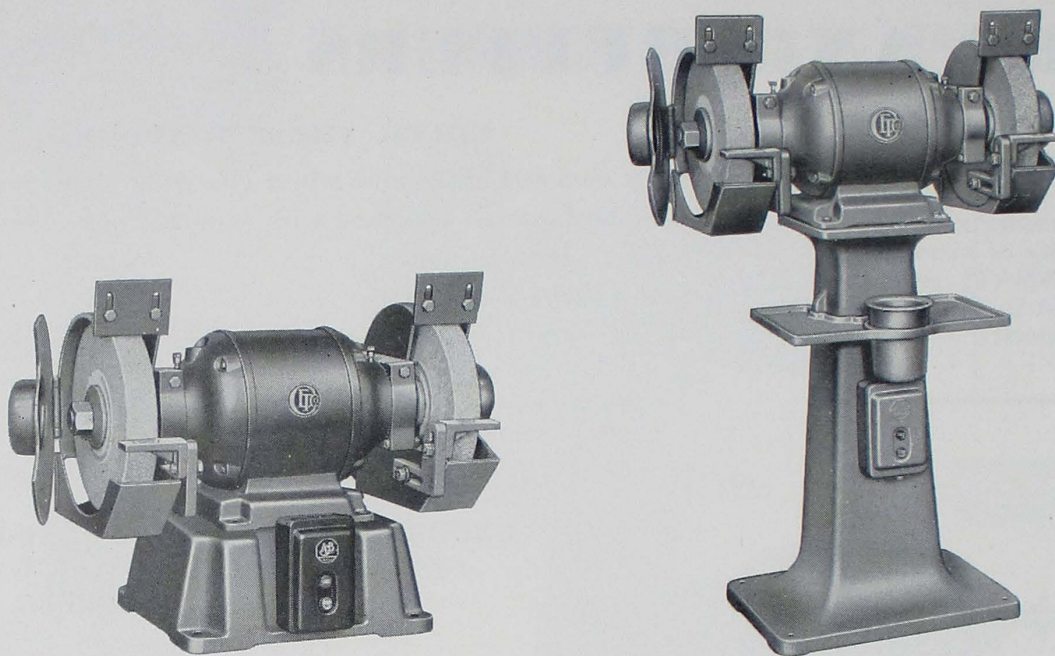


1, 2, 3 and 5 H. P.  
**COMBINATION GRINDERS AND BUFFERS**  
Type GPQA— $\frac{3}{4}$  H. P.  
Type GPRA—1 H. P.  
Type GPSA—2 H. P.  
Type GPVA—3 H. P.  
Type GPWA—5 H. P.  
Also furnished in bench type, see price sheet.

For 25 Cycles (2 or 3 Phase) Add as follows:  
 $\frac{3}{4}$ , 1, 2 or 3 H.P. .... 20% to List Price  
5 H.P. .... Price on Application  
For Single Phase (50 or 60 Cycles) Over 1 H.P. Add as Follows:  
2 or 3 H.P. .... 20% to List Price  
5 H.P. .... 30% to List Price  
For Single Phase (25 Cycles)—Price on Application.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



## 12 and 14-Inch Bench and Pedestal Grinders

### ALTERNATING CURRENT ONLY

Order by Type and Volts, Giving Cycles and Phase.

GENERAL Utility Ball-Bearing Bench and Pedestal Grinders, recommended for general-purpose grinding of all kinds. Wheel guards are fully enclosed safety type, equipped with hinged end covers, spark breakers, exhaust connections, and are adjustable to the wear of the grinding wheels. Ball bearings are mounted in dust-proof housings and are correctly locked to shaft to prevent wear. Magnetic starter, with overload and no-voltage protection is standard equipment. Shatter-proof glass eye shields, flexible light arms and twist drill grinding attachment furnished as extras, see page 10.

EQUIPMENT — Two grinding wheels, wheel guards and grinding rests.

### SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Diameter Shaft Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
BTA—Bench	220-60-3	2	1750	12"x2"	1 1/4"	20 1/2"	14"	17 1/2"x16"	375	450	HACK
BTA—Bench	440-60-3	2	1750	12"x2"	1 1/4"	20 1/2"	14"	17 1/2"x16"	375	450	HAF
FTA—Pedestal	220-60-3	2	1750	12"x2"	1 1/4"	20 1/2"	39"	20"x15"	440	565	HECTOR
FTA—Pedestal	440-60-3	2	1750	12"x2"	1 1/4"	20 1/2"	39"	20"x15"	440	565	HEATH
VCA—Bench	220-60-3	3	1750	14"x2 1/2"	1 1/4"	24"	14"	17 1/2"x16"	415	490	HARPOON
VCA—Bench	440-60-3	3	1750	14"x2 1/2"	1 1/4"	24"	14"	17 1/2"x16"	415	490	HARNESS
FCA—Pedestal	220-60-3	3	1750	14"x2 1/2"	1 1/4"	24"	39"	20"x15"	480	600	HELMET
FCA—Pedestal	440-60-3	3	1750	14"x2 1/2"	1 1/4"	24"	39"	20"x15"	480	600	HEAT

For 2 phase, odd cycles, or 550 volts, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

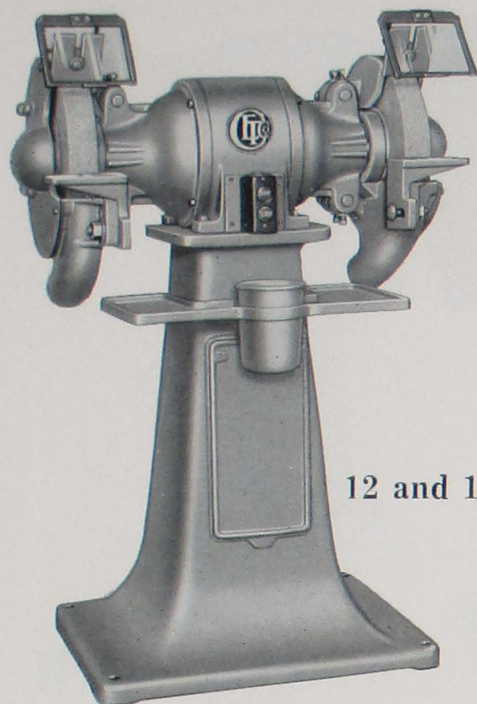
For single phase, see price sheet.

Specify voltage cycles and phase.

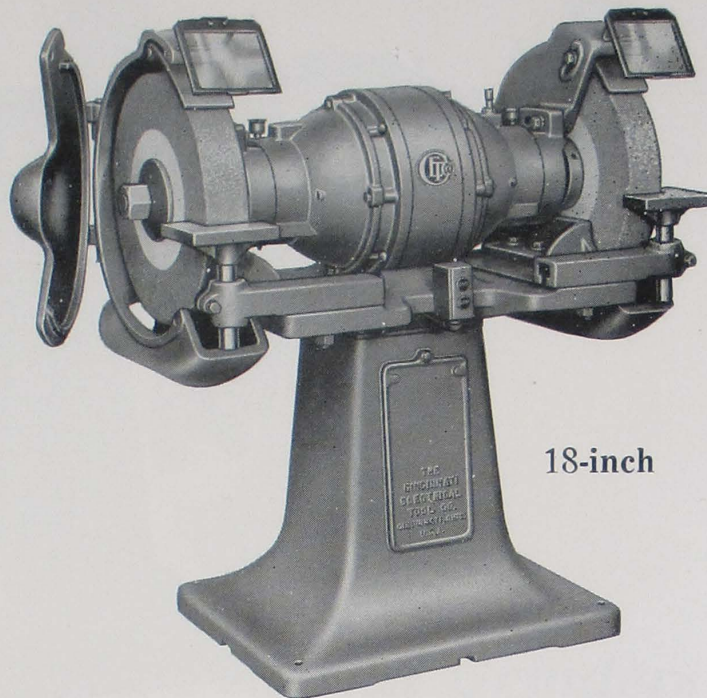
You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY



12 and 14-inch



18-inch

## Ball-Bearing Pedestal Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**H**EAVY-DUTY GRINDERS, especially designed and built for continuous production work. Spindle is of nickel steel, extra heavy, and provided with shaft locking device for changing wheels. Ball bearings are mounted in dust-proof housings in closest proximity to grinding wheels, and are correctly locked to the shaft to provide end thrust and eliminate wear. Wheel guards are adjustable, safety type and equipped with hinged doors, exhaust connections, spark breakers and adjustable shatter-proof glass eye shields. Grinding rests are also adjustable. Magnetic starter with overload and no-voltage protection is standard equipment. Starter is mounted in the pedestal of grinder, push-button station on the motor frame. Twist drill grinding attachment and flexible light arms furnished as extras, see page 10.

Grinding Wheels are not regularly furnished, but can be supplied on order..

For boiler plate wheel guards, see price sheet.

12 and 14-Inch Grinders also furnished in bench type, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed R.P.M.	Wheel Size	Diameter Shaft Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Weight, Less Wheels	Shipping Weight, Pounds	Code Word
HTA	220-60-3	2	1750	12"x2"	1 1/4"	22 1/2"	37 1/2"	25"x20"	500	650	BULLOCK
HTA	440-60-3	2	1750	12"x2"	1 1/4"	22 1/2"	37 1/2"	25"x20"	500	650	BULLY
HCA	220-60-3	3	1750	14"x2 1/2"	1 1/4"	22 1/2"	38"	25"x20"	550	710	BUNDLE
HCA	440-60-3	3	1750	14"x2 1/2"	1 1/4"	22 1/2"	38"	25"x20"	550	710	BUNG
HEA	220-60-3	5	1750	14"x3"	1 1/4"	24 1/2"	38"	25"x20"	600	760	BABER
HEA	440-60-3	5	1750	14"x3"	1 1/4"	24 1/2"	38"	25"x20"	600	760	BABOO
FFA	220-60-3	5	1160	18"x3"	1 1/2"	31"	35"	28"x23"	1085	1240	HARBOR
FFA	440-60-3	5	1160	18"x3"	1 1/2"	31"	35"	28"x23"	1085	1240	HAVOC

Made in 2 or 3 phase only. For 2 phase, odd cycles, or 550 volts, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

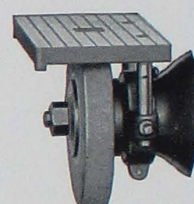
HT	115	2	1750	12"x2"	1 1/4"	22 1/2"	38"	25"x20"	550	700	BULLET
HT	230	2	1750	12"x2"	1 1/4"	22 1/2"	38"	25"x20"	550	700	BULLION
HC	115	3	1750	14"x2 1/2"	1 1/4"	23 1/2"	39"	25"x20"	600	760	BULWARK
HC	230	3	1750	14"x2 1/2"	1 1/4"	23 1/2"	39"	25"x20"	600	760	BUMPER
HE	115	5	1750	14"x3"	1 1/4"	24 1/2"	39"	25"x20"	730	890	BADEN
HE	230	5	1750	14"x3"	1 1/4"	24 1/2"	39"	25"x20"	730	890	BAIN
FF	115	5	1150	18"x3"	1 1/2"	32 1/2"	35"	28"x23"	1060	1225	HAMLET
FF	230	5	1150	18"x3"	1 1/2"	32 1/2"	35"	28"x23"	1060	1225	HAMPER

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



Surface Grinding Attachment

12-inch

## Combination Wet and Dry Grinder

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**H**EAVERY DUTY Combination Wet and Dry Grinder especially designed and built for continuous production work. Wet grinding side has a special hood, splash bowl, water reservoir with settling chamber, adjustable nozzle, valve and centrifugal pump. The pump is driven by a belt from the pulley on the wheel shaft and is so arranged that the bearings are not under water. The splash bowl and reservoir are of one piece and have a capacity of 2½ gallons or more. Spindle is of nickel steel and extra heavy. Ball bearings are mounted in dust-proof housings and correctly locked to the shaft to provide end thrust and eliminate wear. Wheel guard on dry grinding side is safety type, with hinged door, exhaust connection, spark breaker and adjustable shatter-proof eye shield. Tool rests are adjustable. Magnetic starter with overload and no-voltage protection is standard equipment. Starter is mounted in the base of grinder, push-button station on the motor frame. Twist drill grinding attachment furnished as an extra, see page 10.

Grinding wheels are not regularly furnished, but can be supplied on order.  
Surface Grinding Attachment, for dry side, can be furnished, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed R.P.M.	Wheel Size	Diameter Shaft Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Weight, Less Wheels Pounds	Shipping Weight, Pounds	Code Word
WTA	220-60-3	2	1750	12" x 2"	1¼"	22¾"	37½"	25"x20"	570	690	TRITE
WTA	440-60-3	2	1750	12" x 2"	1¼"	22¾"	37½"	25"x20"	570	690	TUNNY
WGA	220-60-3	3	1750	12" x 2"	1¼"	22¾"	37½"	25"x20"	580	700	TABBY
WGA	440-60-3	3	1750	12" x 2"	1¼"	22¾"	37½"	25"x20"	580	700	TABOO

Made in 2 or 3 phase only. For 2 phase, odd cycles, or 550 volts, mention after code word.  
Speed for 25 cycles, 1500 R.P.M.  
Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

WT	115	2	1750	12" x 2"	1¼"	22¾"	38"	25"x20"	665	785	TUMID
WT	230	2	1750	12" x 2"	1¼"	22¾"	38"	25"x20"	665	785	TURBOT
WG	115	3	1750	12" x 2"	1¼"	22¾"	38"	25"x20"	680	800	TALE
WG	230	3	1750	12" x 2"	1¼"	22¾"	38"	25"x20"	680	800	TALUS

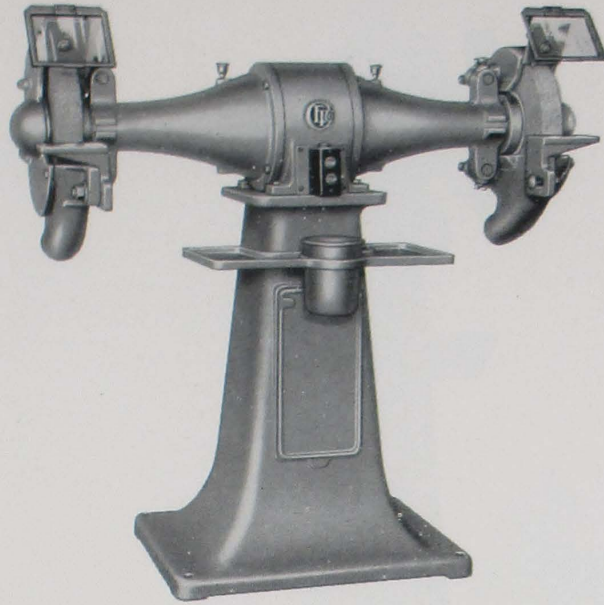
You should have an **AIR MASTER** with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



8 and 10-inch



12 and 14-inch

## Wide Type Ball-Bearing Pedestal Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**H**EAVERY-DUTY GRINDERS, especially adapted for continuous production work. The wide spread between wheels allows maximum accessibility in grinding long and odd-shaped pieces. Spindle is of nickel steel and provided with shaft locking device for changing wheels. Four deep-groove ball bearings are mounted in dustproof housings and correctly locked to the shaft to provide end thrust and eliminate wear. Wheel guards are of fully enclosed safety type, adjustable to wear of wheels. (Guard not adjustable on  $\frac{1}{2}$  H.P. unit.) Grinding rests are also adjustable. Shatter-proof glass eye shields are furnished as standard equipment on 2, 3, and 5 H.P. Grinders only. Eye shields for  $\frac{1}{2}$  and 1 H.P. Grinders and flexible light arms, for all sizes, see page 10.

$\frac{1}{2}$  and 1 H.P. Grinders furnished with two-pole toggle switch.

2, 3 and 5 H.P. Grinders have magnetic starters with overload and no-voltage protection and push-button control.

Grinding Wheels are not regularly furnished with 2, 3 or 5 H.P. Grinders, but can be supplied on order.

For boiler plate wheel guards, see price sheet.

$\frac{1}{2}$  and 1 H.P. Grinders also furnished in bench type, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Wheel Size	Diam. Shaft Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
WAA	110-60-1	$\frac{1}{2}$	3400	8" x 1"	$\frac{5}{8}$ "	29 $\frac{1}{2}$ "	39 $\frac{1}{2}$ "	16" x 12"	220	340	WAD
†WAA	220-60-1	$\frac{1}{2}$	3400	8" x 1"	$\frac{5}{8}$ "	29 $\frac{1}{2}$ "	39 $\frac{1}{2}$ "	16" x 12"	220	340	WAG
WBA	110-60-1	1	1750	10" x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	31"	40"	20" x 15"	350	500	WALK
†WBA	220-60-1	1	1750	10" x 1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	31"	40"	20" x 15"	350	500	WANE
*WSA	220-60-3	2	1750	12" x 2"	1 $\frac{1}{4}$ "	38"	37 $\frac{1}{2}$ "	25" x 20"	550	700	WADE
*WSA	440-60-3	2	1750	12" x 2"	1 $\frac{1}{4}$ "	38"	37 $\frac{1}{2}$ "	25" x 20"	550	700	WAFA
*WCA	220-60-3	3	1750	14" x 2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	38"	38"	25" x 20"	600	750	WAIL
*WCA	440-60-3	3	1750	14" x 2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	38"	38"	25" x 20"	600	750	WAFB
*WFA	220-60-3	5	1750	14" x 3"	1 $\frac{1}{4}$ "	42"	38 $\frac{1}{4}$ "	28" x 23"	650	815	WAIN
*WFA	440-60-3	5	1750	14" x 3"	1 $\frac{1}{4}$ "	42"	38 $\frac{1}{4}$ "	28" x 23"	650	815	WAKE

†Can also be furnished for 220, 440 or 550 volts, 2 or 3 phase, regular list price.

\*Made in 2 or 3 phase only. — For 2 phase, odd cycles, or 550 volts, mention after code word. Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

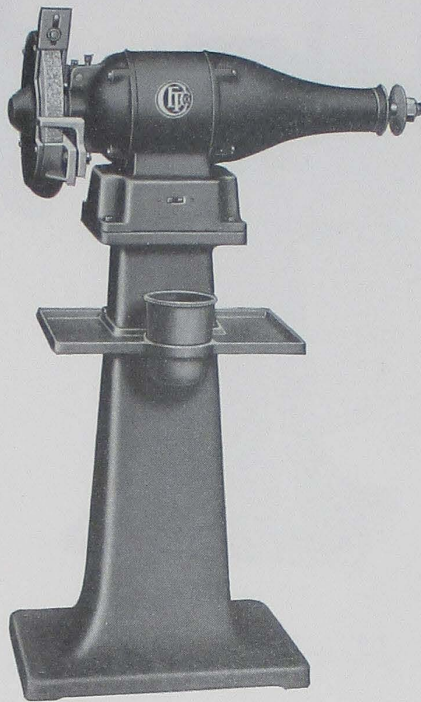
### DIRECT CURRENT SPECIFICATIONS

WS	115	2	1750	12" x 2"	1 $\frac{1}{4}$ "	40"	37 $\frac{1}{2}$ "	25" x 20"	610	760	WALL
WS	230	2	1750	12" x 2"	1 $\frac{1}{4}$ "	40"	37 $\frac{1}{2}$ "	25" x 20"	610	760	WASP
WC	115	3	1750	14" x 2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	40"	38"	25" x 20"	650	800	WHEELK
WC	230	3	1750	14" x 2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	40"	38"	25" x 20"	650	800	WHIG
WF	115	5	1750	14" x 3"	1 $\frac{1}{4}$ "	42"	35"	28" x 23"	850	1025	WHIST
WF	230	5	1750	14" x 3"	1 $\frac{1}{4}$ "	42"	35"	28" x 23"	850	1025	WOLF

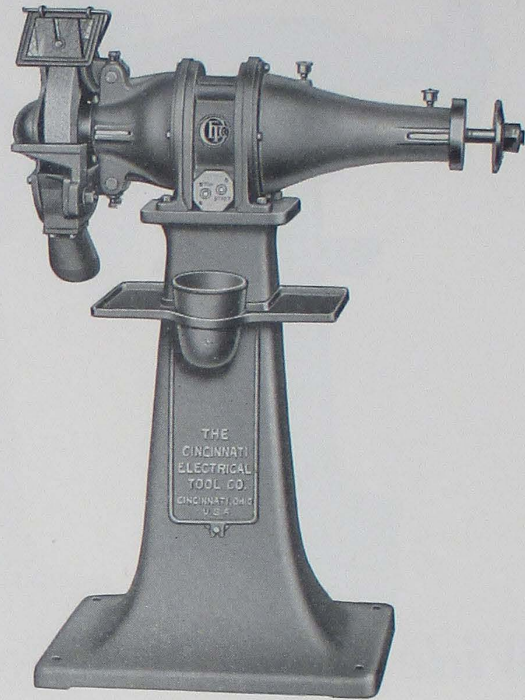
You should have an **AIR MASTER** with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



8 and 10-inch



12 and 14-inch

## BALL-BEARING

## Combination Grinders and Buffers

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

THESE Combination Grinders and Buffers offer an unusually wide range of work, as they can be used for grinding and buffing at the same time. Extended spindle can be used with wire, cloth or felt wheels. Wheel guard is fully enclosed safety type, adjustable to the wear of wheel. (Guard not adjustable on  $\frac{1}{2}$  H.P. unit.)

$\frac{3}{4}$  and 1 H.P. Grinders furnished with two-pole toggle switch.

Shatter-proof glass eye shield and shaft locking device for changing wheels furnished on 2 and 3 H.P. machines. 2 and 3 H.P. machines equipped with magnetic starter with both overload and no-voltage protection, mounted in the pedestal, push-button station on motor frame.

Grinding wheel is not regularly furnished with 2 and 3 H.P. machines, but can be supplied on order.

$\frac{3}{4}$  and 1 H.P. sizes also furnished in bench type, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H.P.	Load Speed, R.P.M.	Wheel Size	Diam. Shaft Bet. Flanges	Distance Between Wheels	Length, Extended Spindle	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
KHA	110-60-1	$\frac{3}{4}$	3525	8"x1"	$\frac{5}{8}$ "	22 $\frac{1}{4}$ "	12"	39 $\frac{1}{2}$ "	16"x12"	195	290	KITTEN
†KHA	220-60-1	$\frac{3}{4}$	3525	8"x1"	$\frac{5}{8}$ "	22 $\frac{1}{4}$ "	12"	39 $\frac{1}{2}$ "	16"x12"	195	290	KNIFE
KRA	110-60-1	1	1750	10"x1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	25"	14 $\frac{1}{2}$ "	40"	20"x15"	300	425	KNIGHT
†KRA	220-60-1	1	1750	10"x1 $\frac{1}{4}$ "	$\frac{3}{4}$ "	25"	14 $\frac{1}{2}$ "	40"	20"x15"	300	425	KNOLL
*KTA	220-60-3	2	1750	12"x2"	1 $\frac{1}{4}$ "	29"	16"	38"	25"x20"	470	625	KAFTAN
*KTA	440-60-3	2	1750	12"x2"	1 $\frac{1}{4}$ "	29"	16"	38"	25"x20"	470	625	KAGO
*KVA	220-60-3	3	1750	14"x2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	29"	16"	38"	25"x20"	500	650	KID
*KVA	440-60-3	3	1750	14"x2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	29"	16"	38"	25"x20"	500	650	KAMA

†Can also be furnished for 220, 440 or 550 volts, 2 or 3 phase, regular list price.

\*Made in 2 or 3 phase only. If 2 phase is desired, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

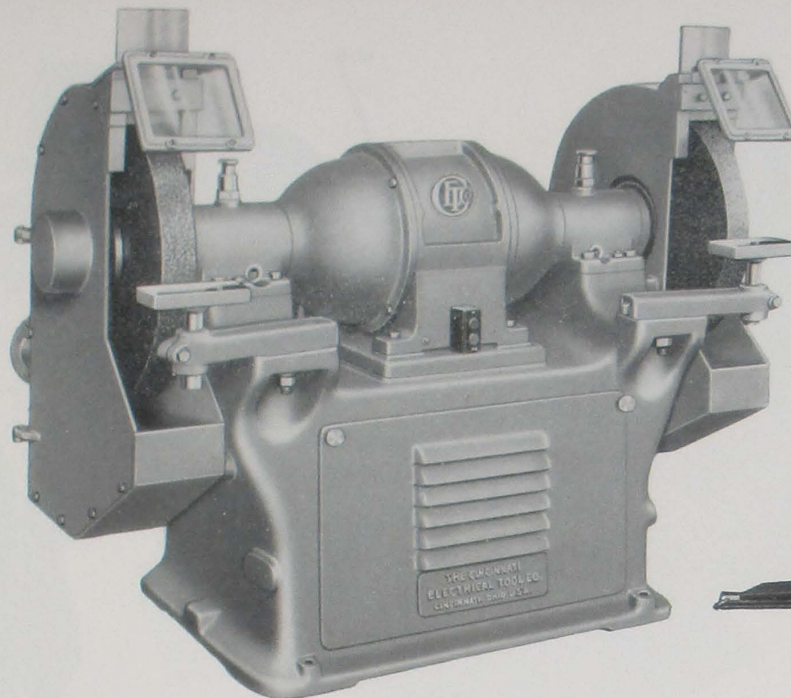
KT	115	2	1750	12"x2"	1 $\frac{1}{4}$ "	29"	13"	38"	25"x20"	525	675	KETAL
KT	230	2	1750	12"x2"	1 $\frac{1}{4}$ "	29"	13"	38"	25"x20"	525	675	KHAKI
KV	115	3	1750	14"x2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	33"	16"	38"	25"x20"	550	700	KILT
KV	230	3	1750	14"x2 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	33"	16"	38"	25"x20"	550	700	KISMET

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



WHEEL DRESSER

18, 20 and 24-inch

## Roller-Bearing Pedestal Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**H** EAVY-DUTY Roller-Bearing Grinders, built for continuous service. Nickel steel one-piece shaft is equipped with four Timken adjustable roller bearings, running in oil. Wheel guards are of the American Foundryman's Association type, made of boiler plate steel with hinged covers and equipped with large shatterproof glass eye shields. The guard itself is stationary, the only adjustment required to compensate for the wear of the wheel being the movement of the tongue or spark shield. Grinding rests are also adjustable. A spindle locking device is provided to facilitate changing of wheels. Magnetic starter with overload and no-voltage protection is standard equipment. Starter is mounted in the base of grinder, push-button station on the motor frame. For wheel dresser, see price sheet.

Can be furnished with flanges for 10" or 12" bore grinding wheels, see price sheet. Grinding wheels not regularly furnished, supplied on order.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed, R.P.M.	Wheel Size	Diameter Shaft Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Weight, Less Wheels Pounds	Shipping Weight, Pounds	Code Word
CFA	220-60-3	5	1150	18"x3"	2"	42"	35"	34"x25½"	1575	1740	CABAL
CFA	440-60-3	5	1150	18"x3"	2"	42"	35"	34"x25½"	1575	1740	CAJOLE
HGA	220-60-3	7½	1150*	20"x3"	2"	42"	35"	34"x25½"	1650	1835	CASERN
HGA	440-60-3	7½	1150*	20"x3"	2"	42"	35"	34"x25½"	1650	1835	CACTUS
JSA	220-60-3	7½	850	24"x4"	2¼"	52½"	34"	42½"x30"	2375	2550	CALYX
JSA	440-60-3	7½	850	24"x4"	2¼"	52½"	34"	42½"x30"	2375	2550	CANLET
JTA	220-60-3	10	850	24"x4"	2¼"	52½"	34"	42½"x30"	2425	2610	CANARD
JTA	440-60-3	10	850	24"x4"	2¼"	52½"	34"	42½"x30"	2425	2610	CANCAN

Furnished in 2 or 3 phase only. For 2 phase, odd cycles, or 550 volts, mention after code word.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

CF	115	5	1160	18"x3"	2"	42"	35"	34"x25½"	1700	1865	CANELLA
CF	230	5	1160	18"x3"	2"	42"	35"	34"x25½"	1700	1865	CANTO
HG	115	7½	1160*	20"x3"	2"	42"	35"	34"x25½"	1800	1975	CAIRN
HG	230	7½	1160*	20"x3"	2"	42"	35"	34"x25½"	1800	1975	CARDER
JS	115	7½	850	24"x4"	2¼"	52½"	34"	42½"x30"	2500	2700	CAPIAS
JS	230	7½	850	24"x4"	2¼"	52½"	34"	42½"x30"	2500	2700	CAPLIN
JT	115	10	850	24"x4"	2¼"	52½"	34"	42½"x30"	2625	2825	CAPON
JT	230	10	850	24"x4"	2¼"	52½"	34"	42½"x30"	2625	2825	CAPRIC

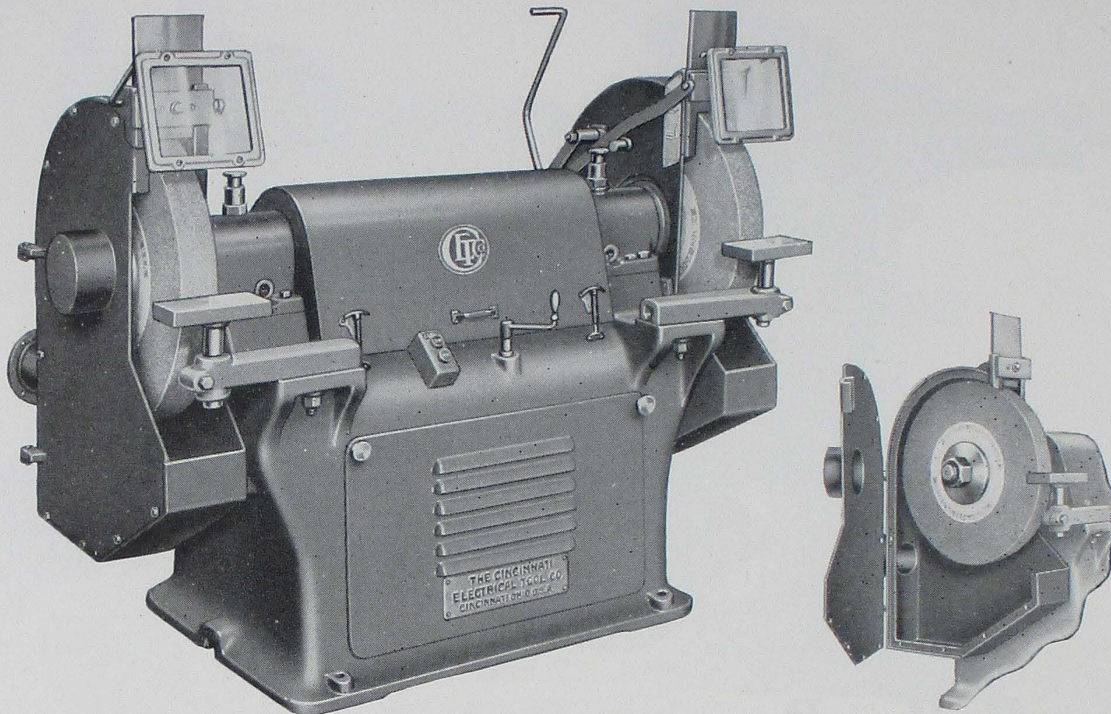
\*Also furnished at speed of 1750 R.P.M. for resinoid bonded wheels, at regular list price, but in which case 10" flanges are recommended, see price sheet.

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



18, 20 and 24-inch

## Three Speed Snagging Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, give Cycles and Phase

A smooth, quiet-running heavy duty Variable Speed Vee Belt Snagging Grinder, designed for high-speed production grinding. No noise—no vibration—no back lash—no chatter, as in gear-driven, snagging grinders. Three-speed changes are provided to maintain efficient peripheral speeds on either vitrified or high-speed grinding wheels for the entire life of the wheels. (See table below.) In changing the spindle speed, it is but necessary to raise the motor, releasing the tension on the Vee belts, and move the three-speed sheave on the spindle into the next position by means of a rack and pinion. A positive speed control operating in conjunction with the spark shields prevents overspeeding of the wheels. A visible indicating plate is located on the side of the guard, clearly indicating when the wheel has worn to a point that allows the speed to be changed, thus preventing underspeeding of the wheels. Nickel Steel Shaft—supported by four heavy duty sealed type ball bearings, running in oil in dust-proof housings. A gauge is provided to show the proper oil level as well as a conveniently located drain plug for oil renewal. A spindle locking device is provided to facilitate changing of wheels. A split cast coupling on the spindle pro-

vides an easy means of applying new belts. Removal of the coupling exposes a space between the shaft ends, allowing the belts to pass through the opening. Wheel guards are of the American Foundrymen's Association type. They are made of boiler plate steel with hinged covers and equipped with large shatterproof glass eye shields. The guard itself is stationary, the only adjustment required to compensate for the wear of the wheel being the movement of the tongue or spark shield. The design of the lower front section of the guard eliminates the possibility of dropped pieces becoming wedged between the wheel and guard. This design is also the means of a more positive trap for sparks and chips. The location of the exhaust port is such that it cannot become obstructed by any residue which may form in the bottom of the guard through the fusing of hot sparks and metal chips. Magnetic starter with overload and no-voltage protection is standard equipment. Starter is mounted in the base of the grinder and the push-button station on the front of the cabinet within easy reach of the operator. For wheel dresser see page 31.

Grinding wheels not regularly furnished, but supplied on order.

\*Wheel flanges are  $2\frac{1}{4}$ " bore vitrified wheels furnished as Standard Equipment.  
For 10" or 12" bore wheel flanges for use with high speed wheels, see price sheet.

### SPECIFICATIONS

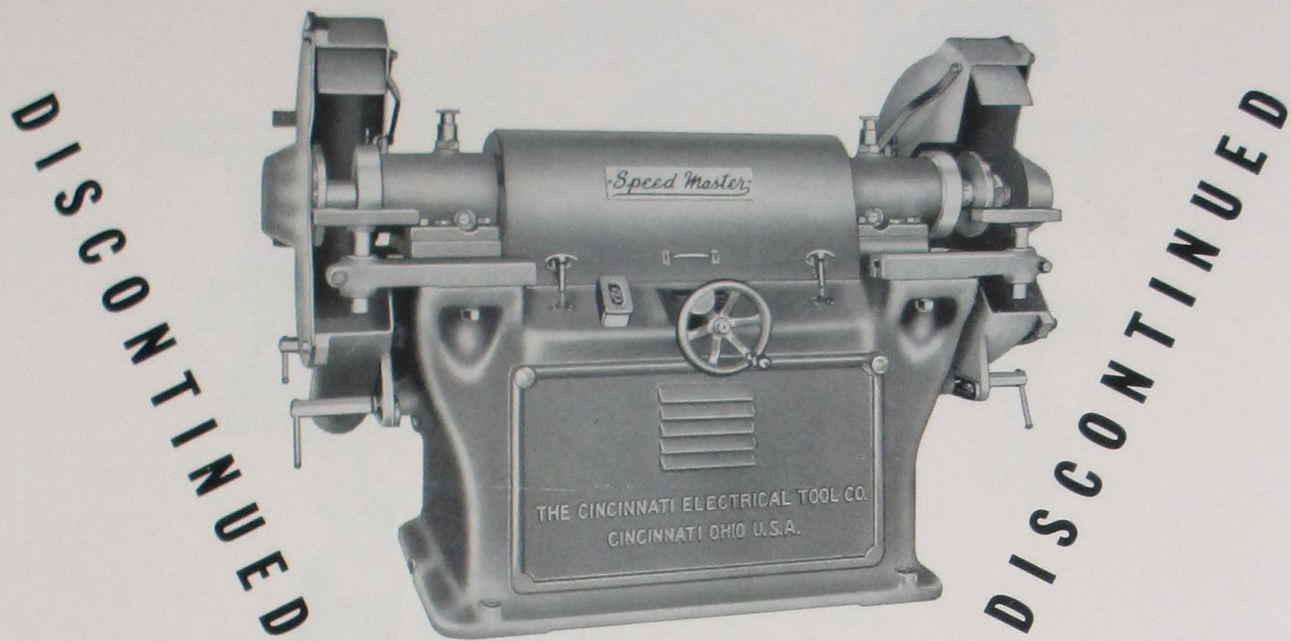
Type	Volts	H. P.	Wheel Size	Spindle Speeds for Vitrified Wheels	Spindle Speeds for High Speed Wheels	Diameter Shaft Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Weight, Less Wheels Pounds	Shipping Weight, Pounds	Code Word
BAA	220-60-3	5	*18"x3"	1200-1400-	2000-2300-	2 $\frac{1}{4}$ "	52 $\frac{5}{8}$ "	34"	42 $\frac{5}{8}$ "x30"	1975	2150	CACAO
BAA	440-60-3	5	*18"x3"	1650	2700	2 $\frac{1}{4}$ "	52 $\frac{5}{8}$ "	34"	42 $\frac{5}{8}$ "x30"	1975	2150	CADE
BCA	220-60-3	7 $\frac{1}{2}$	*20"x3"	1100-1400-	1800-2150-	2 $\frac{1}{4}$ "	52 $\frac{5}{8}$ "	34"	42 $\frac{5}{8}$ "x30"	2075	2225	CADGE
BCA	440-60-3	7 $\frac{1}{2}$	*20"x3"	1700	2550	2 $\frac{1}{4}$ "	52 $\frac{5}{8}$ "	34"	42 $\frac{5}{8}$ "x30"	2075	2225	CALM
BGA	220-60-3	10	*24"x3"	900-1200-	1500-1800-	2 $\frac{1}{4}$ "	52 $\frac{5}{8}$ "	34"	42 $\frac{5}{8}$ "x30"	2500	2700	CANOE
BGA	440-60-3	10	*24"x3"	1400	2100	2 $\frac{1}{4}$ "	52 $\frac{5}{8}$ "	34"	42 $\frac{5}{8}$ "x30"	2500	2700	CANTER

Furnished in 2 or 3 phase only. For 2 phase or 550 volts, mention after code word.  
Can also be furnished for Direct Current and odd cycles Alternating Current; prices on application.  
\*When ordering, specify whether vitrified or high speed wheels are to be used.  
Specify voltage cycles and phase.

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY



## 24 and 30-inch "Speed Master" Variable Speed Snagging Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

THE CINCINNATI "Speed Master", Variable Speed Snagging Grinder, is a big improvement over 2 or 3 Speed Belt or Gear Driven Grinders, it being unnecessary to change pulleys or belts, or shift gears, to effect the various speed changes.

Efficient peripheral speeds, on either vitrified or high speed grinding wheels, are maintained, for the entire life of the wheels. (See table below.)

To increase the spindle speed, to compensate for wheel wear, it is but necessary to turn a conveniently located hand wheel, on the front of the pedestal. The adjustment of the pitch diameters, of the pulleys, is synchronized with the movement of the wheel guards and spark breakers, making it absolutely impossible to overspeed the grinding wheels.

The nickel steel shaft is supported by four heavy duty, sealed type ball bearings, running in oil, in dust-proof housings, with labyrinth seals, preventing the entrance of dirt or grit into the bearing chambers. A gauge is provided, on each bearing box, to show the proper oil level, also a conveniently located drain plug for oil renewal.

A spindle locking device is provided to facilitate changing of wheels. A split coupling, keyed to the shaft, makes easy belt renewal.

Wheel guards are of boiler plate, adjustable to the wear of the grinding wheels and have exhaust connections, hinged doors, spark breakers and shatterproof glass eye shields. Grinding rests are also adjustable.

These Grinders are equipped with fully enclosed ball bearing, fan-cooled motor, on rear of pedestal.

A magnetic starter with overload and no-voltage protection is standard equipment.

For wheel dresser, see page 31.

Grinding wheels not regularly furnished, but supplied on order.

\*Wheel flanges for 2 1/4" bore vitrified wheels furnished as Standard Equipment.  
For 10" or 12" bore wheel flanges for use with high speed wheels, see price sheet.

### SPECIFICATIONS

Type	Volts	H.P.	Wheel Size *	Spindle Speeds for Vitrified Wheels	Spindle Speeds for High Speed Wheels	Diam. Shaft/Bet. Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Weight, Less Wheels Pounds	Shipping Weight, Pounds	Code Word
VBKA	220-60-3	10	24"x3"	900 to 1400	1500 to 2100	2 1/4"	52 3/8"	34"	42 3/8"x30"	3300	3550	CORNEA
VBKA	440-60-3	10	24"x3"	900 to 1400	1500 to 2100	2 1/4"	52 3/8"	34"	42 3/8"x30"	3300	3550	CORONET
VBMA	220-60-3	15	30"x3"	750 to 1050	1200 to 1750	2 1/4"	52 3/8"	34"	42 3/8"x30"	3600	3900	CORRAL
VBMA	440-60-3	15	30"x3"	750 to 1050	1200 to 1750	2 1/4"	52 3/8"	34"	42 3/8"x30"	3600	3900	CORNET

Furnished in 2 or 3 phase only. For 2 phase or 550 volts, mention after code word.

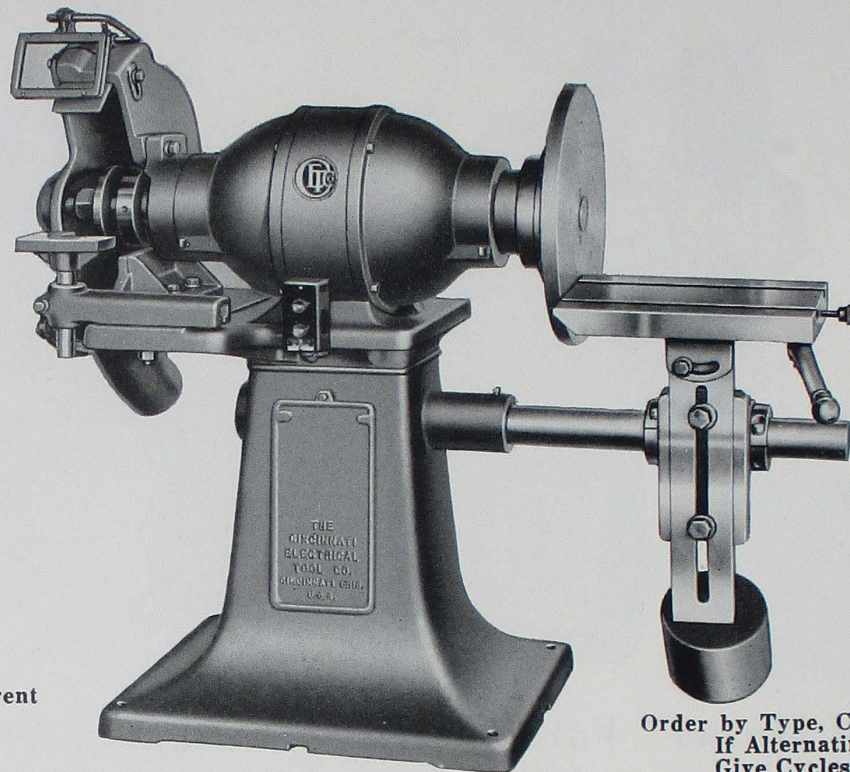
For Direct Current and odd cycles Alternating Current: prices on application.

\*When ordering, specify whether vitrified or high speed wheels are to be used.

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY



Alternating Current  
Direct Current

Order by Type, Current and Volts.  
If Alternating Current,  
Give Cycles and Phase.

## Combination Single End Disc Grinders

THE CINCINNATI Combination Single End Disc Grinders are ideally suited for use in plants which do not have enough disc grinding to justify the investment in a single-purpose grinder. The grinding wheel may be used for grinding castings or tools, greatly increasing the general utility of the machine.

The spindle is of nickel steel, mounted on extra large ball bearings with special provision for both radial as well as thrust loads. The disc is of high-grade steel accurately machined and balanced to ensure running true. A table with hand-lever feed is regularly furnished, but a plain table without feed can be supplied if desired—price on application. The standard disc may be had properly drilled for mounting steel-back abrasive discs, at no additional charge; also arranged to carry ring wheel chucks—price on application. Adjustable guard, with exhaust connection, can be supplied for disc, price on application.

The wheel guard on the grinding wheel side is fully enclosed and adjustable to the wear of the wheel. (Guard not adjustable on 1/2 H.P. unit). A shatter-proof glass eye shield is furnished as standard equipment on grinders over 1 H.P.; for eye-shield price for 1/2 and 1 H.P. grinders, see page 10. 1/2 and 1 H.P. grinders are furnished with a two-pole toggle switch mounted in the base; grinders 2 H.P. and over with magnetic starters with overload and no-voltage protection mounted in the pedestal, with push-button station on the motor frame.

Grinding wheel furnished as standard equipment on 1/2 and 1 H.P. grinders only; can be supplied on machines 2 H.P. and over on order.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	HP	Load Speed RPM	Wheel Size	Disc Size	Size of Table	Diam. Shaft Bet. Flanges	Rocker Shaft Diam.	Horiz. Adj. of Table on Rocker Shaft	Vert. Adj. of Table	Hand Lever Feed	Lgth. Overall	Height Floor to Center of Spindle	Size Base at Bottom	Net Wght. Lbs.	Ship. Wght. Lbs.	Code Word
FHAC	110-60-1	1 1/2	3450	8x1"	7"	6x10"	5/8"	1 3/4"	5 1/2"	4 1/2"	2 1/4"	34 1/2"	39"	16x12"	305	395	DALE
†FHAC	220-60-1	1 1/2	3450	8x1"	7"	6x10"	5/8"	1 3/4"	5 1/2"	4 1/2"	2 1/4"	34 1/2"	39"	16x12"	305	395	DAMP
FOAC	110-60-1	1	1750	10x1 1/4"	8"	6x10"	3/4"	1 3/4"	5 1/2"	4 1/2"	2 1/4"	35 3/4"	39"	20x15"	415	530	DARE
†FOAC	220-60-1	1	1750	10x1 1/4"	8"	6x10"	3/4"	1 3/4"	5 1/2"	4 1/2"	2 1/4"	35 3/4"	39"	20x15"	415	530	DARK
*HTAC	220-60-3	2	1750	12x2"	10"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	44"	39"	25x20"	575	700	DIME
*HTAC	440-60-3	2	1750	12x2"	10"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	44"	39"	25x20"	575	700	DINT
*HCAC	220-60-3	3	1750	14x2 1/2"	12"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	45 1/4"	38"	25x20"	615	740	DING
*HCAC	440-60-3	3	1750	14x2 1/2"	12"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	45 1/4"	38"	25x20"	615	740	DONG
*HEAC	220-60-3	5	1750	14x3"	14"	10x16"	1 3/4"	2 3/4"	5 1/2"	5"	3 1/4"	51 1/2"	38"	25x20"	700	825	DOCK
*HEAC	440-60-3	5	1750	14x3"	14"	10x16"	1 3/4"	2 3/4"	5 1/2"	5"	3 1/4"	51 1/2"	38"	25x20"	700	825	DOLF
*FSAC	220-60-3	7 1/2	1160	18x3"	18"	10x16"	1 1/2"	2 3/4"	5 1/2"	5 1/2"	3 3/4"	56"	38"	28x23"	1300	1460	DOLT
*FSAC	440-60-3	7 1/2	1160	18x3"	18"	10x16"	1 1/2"	2 3/4"	5 1/2"	5 1/2"	3 3/4"	56"	38"	28x23"	1300	1460	DOOM

†Can also be furnished for 220, 440 or 550 volts, 2 or 3 phase, regular list price.

\*Made in 2 or 3 phase only, also for 550 volts. If 2 phase is desired, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

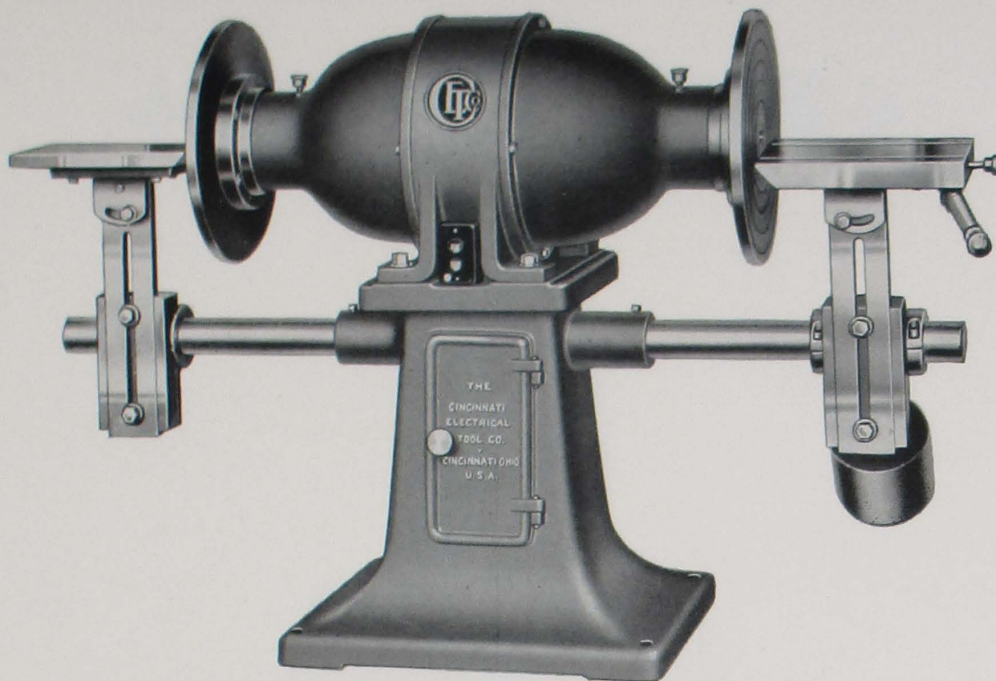
FOC	115	1	1750	10x1 1/4"	8"	6x10"	3/4"	1 3/4"	5 1/2"	4 1/2"	2 1/4"	33 1/2"	39"	20x15"	430	545	DOST
FOC	230	1	1750	10x1 1/4"	8"	6x10"	3/4"	1 3/4"	5 1/2"	4 1/2"	2 1/4"	33 1/2"	39"	20x15"	430	545	DOVE
HTC	115	2	1750	12x2"	10"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	44"	39"	25x20"	605	730	DOZE
HTC	230	2	1750	12x2"	10"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	44"	39"	25x20"	605	730	DRAB
HCC	115	3	1750	14x2 1/2"	12"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	45 1/4"	38"	25x20"	655	780	DRAG
HCC	230	3	1750	14x2 1/2"	12"	6x10"	1 1/4"	2"	5 1/2"	4 1/2"	2 1/4"	45 1/4"	38"	25x20"	655	780	DRAM
HEC	115	5	1750	14x3"	14"	10x16"	1 3/4"	2 3/4"	5 1/2"	5"	3 1/4"	52"	38"	25x20"	800	975	DRAW
HEC	230	5	1750	14x3"	14"	10x16"	1 3/4"	2 3/4"	5 1/2"	5"	3 1/4"	52"	38"	25x20"	800	975	DRAY
FSC	115	7 1/2	1160	18x3"	18"	10x16"	1 1/2"	2 3/4"	5 1/2"	5 1/2"	3 3/4"	60"	38"	28x23"	1300	1600	DRIF
FSC	230	7 1/2	1160	18x3"	18"	10x16"	1 1/2"	2 3/4"	5 1/2"	5 1/2"	3 3/4"	60"	38"	28x23"	1300	1600	DRUM

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*

TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



## Double End Disc Grinders

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

THE CINCINNATI Double Disc Grinders are suitable for a wide variety of surface grinding in shops of all kinds. The spindle is of nickel steel, mounted on extra large ball bearings, with special provision for heavy thrust loads. The discs are of high-grade steel, accurately machined and balanced to ensure running true. A table with hand-lever feed is regularly furnished on the right-hand side of the grinder, with a plain table on the opposite side, but this equipment may be changed to suit individual requirements — price on application. The standard discs may be had properly drilled for mounting steel-back abrasive discs at no additional charge; also arranged to carry ring wheel chucks — price on application. Magnetic starter with both overload and no-voltage protection is mounted in the pedestal, with push-button station on the motor frame. Adjustable guards with exhaust connections can be furnished, prices on application.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H.P.	Load Speed RPM	Disc Size	Size of Table	Rocker Shaft Diam.	Horiz. Adj. of Table on Rocker Shaft	Vert. Adj. of Table	Hand Lever Feed	Lgth. Overall	Height Floor to Center of Spindle	Size Base at Bottom	Net Wght. Lbs.	Ship. Wght. Lbs.	Code Word
HTAD	220-60-3	2	1750	10"	6x10"	2"	5½"	4½"	2¼"	55"	39"	25x20"	650	775	JACK
HTAD	440-60-3	2	1750	10"	6x10"	2"	5½"	4½"	2¼"	55"	39"	25x20"	650	775	JADE
HCAD	220-60-3	3	1750	12"	6x10"	2"	5½"	4½"	2¼"	55½"	38"	25x20"	690	815	JAMB
HCAD	440-60-3	3	1750	12"	6x10"	2"	5½"	4½"	2¼"	55½"	38"	25x20"	690	815	JEER
HEAD	220-60-3	5	1750	14"	10x16"	2¾"	5½"	5"	3¼"	65"	38"	25x20"	775	900	JEHU
HEAD	440-60-3	5	1750	14"	10x16"	2¾"	5½"	5"	3¼"	65"	38"	25x20"	775	900	JOIN
FSAD	220-60-3	7½	1160	18"	10x16"	2¾"	5½"	5½"	3¾"	72"	38"	28x23"	1175	1375	JUKE
FSAD	440-60-3	7½	1160	18"	10x16"	2¾"	5½"	5½"	3¾"	72"	38"	28x23"	1175	1375	JOSS

Made in 2 or 3 phase only; also for 550 volts. If 2 phase is desired, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

HTD	115	2	1750	10"	6x10"	2"	5½"	4½"	2¼"	54"	39"	25x20"	680	805	JINK
HTD	230	2	1750	10"	6x10"	2"	5½"	4½"	2¼"	54"	39"	25x20"	680	805	JOCK
HCD	115	3	1750	12"	6x10"	2"	5½"	4½"	2¼"	55½"	38"	25x20"	730	845	JOKE
HCD	230	3	1750	12"	6x10"	2"	5½"	4½"	2¼"	55½"	38"	25x20"	730	845	JOLT
HED	115	5	1750	14"	10x16"	2¾"	5½"	5"	3¼"	65"	38"	25x20"	875	990	JUST
HED	230	5	1750	14"	10x16"	2¾"	5½"	5"	3¼"	65"	38"	25x20"	875	990	JOIST
FSD	115	7½	1160	18"	10x16"	2¾"	5½"	5½"	3¾"	73"	38"	28x23"	1275	1475	JALAP
FSD	230	7½	1160	18"	10x16"	2¾"	5½"	5½"	3¾"	73"	38"	28x23"	1275	1475	JINGO

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



$\frac{1}{2}$  and 1 H. P.

## Buffing and Polishing Lathes

Alternating Current Only

Order by Type, Current and Volts — If Alternating Current, Give Cycles and Phase

**B**UFFING and Polishing Lathes, especially adapted for buffing and polishing of all kinds. Motor shaft is mounted on four deep-groove radial ball bearings, in dust-proof housings and correctly locked to the shaft, to eliminate wear. Two-pole starting switch is entirely enclosed in the base of the motor. Adjustable hoods furnished, as extras, see page 46.

Buffing wheels are not regularly furnished, but can be supplied on order.  
Also furnished in bench type, see price sheet.

### SPECIFICATIONS

Type	Volts	H. P.	Load Speed, R.P.M.	Diameter Shaft Bet. Flanges	Space Between Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
DHA	110-60-1	$\frac{3}{4}$	3525	$\frac{5}{8}$ "	1"	29 $\frac{1}{4}$ "	39 $\frac{1}{2}$ "	16"x12"	175	275	JOURNAL
*DHA	220-60-1	$\frac{3}{4}$	3525	$\frac{5}{8}$ "	1"	29 $\frac{1}{4}$ "	39 $\frac{1}{2}$ "	16"x12"	175	275	JUSTICE
DRA	110-60-1	1	†1750	$\frac{3}{4}$ "	1 $\frac{1}{4}$ "	32"	40"	20"x15"	260	380	JUTE
*DRA	220-60-1	1	†1750	$\frac{3}{4}$ "	1 $\frac{1}{4}$ "	32"	40"	20"x15"	260	380	JASPER

\*Can also be furnished for 220, 440 or 550 volts, 2 or 3 phase, regular list price.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

†1 H.P. Buffer also furnished 3400 R. P. M., if desired.

Specify voltage cycles and phase.

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



2, 3, 5 and 7½ H. P.

## Buffing and Polishing Lathes

Alternating Current—Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**H** EAVY-DUTY Buffing and Polishing Lathes, especially designed and ruggedly built for continuous service under the most severe conditions. Motor shaft is of high-grade steel, accurately ground to size, and provided with shaft locking device for changing wheels. Four deep-groove ball bearings are mounted in dust-proof housings and are firmly locked to the shaft to provide end thrust and eliminate wear. Magnetic starter with overload and no-voltage protection is mounted in the pedestal. Push-button station is mounted on the motor frame. Adjustable buffing hoods furnished, as extras, see page 46.

Buffing wheels are not regularly furnished, but can be supplied on order.  
Also furnished in bench type, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load *Speed, R.P.M.	Diameter Shaft Bet. Flanges	Space Between Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
DTA	220-60-3	2	1750	1¼"	2"	38½"	37½"	25"x20"	425	565	MUMMY
DTA	440-60-3	2	1750	1¼"	2"	38½"	37½"	25"x20"	425	565	MACAW
DVA	220-60-3	3	1750	1¼"	2½"	38½"	38"	25"x20"	450	575	MILLER
DVA	440-60-3	3	1750	1¼"	2½"	38½"	38"	25"x20"	450	575	MACRO
DFA	220-60-3	5	1750	1¼"	3"	†42" or 52"	38"	25"x20"	475	600	MAJOR
DFA	440-60-3	5	1750	1¼"	3"	†42" or 52"	38"	25"x20"	475	600	MALT
DSA	220-60-3	7½	1750	1½"	3½"	†42" or 52"	37"	28"x23"	620	760	MANLY
DSA	440-60-3	7½	1750	1½"	3½"	†42" or 52"	37"	28"x23"	620	760	MAPLE

Made in 2 or 3 phase only; also for 550 volts. If 2 phase or odd cycles is desired, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

\*Alternating Current Buffers also furnished 3450 R.P.M., if desired.

†42" between wheels Standard Equipment. 52", price on application  
Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

DT	115	2	1750	1¼"	2"	40"	38"	25"x20"	435	575	MANDATE
DT	230	2	1750	1¼"	2"	40"	38"	25"x20"	435	575	MIRACLE
DV	115	3	1750	1¼"	2½"	40"	39"	25"x20"	475	625	MONK
DV	230	3	1750	1¼"	2½"	40"	39"	25"x20"	475	625	MOP
DF	115	5	1750	1¼"	3"	†42" or 52"	39"	25"x20"	550	700	MAGUEY
DF	230	5	1750	1¼"	3"	†42" or 52"	39"	25"x20"	550	700	MALAGA
DS	115	7½	1750	1½"	3½"	†42" or 52"	38"	28"x23"	650	800	MALAR
DS	230	7½	1750	1½"	3½"	†42" or 52"	38"	28"x23"	650	800	MANIS

†42" between wheels Standard Equipment. 52", price on application

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



2, 3 and 5 H. P.

## Buffing and Polishing Lathes

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

THESE Heavy-Duty Buffing and Polishing Lathes are of the same general design as buffers shown on page 37, with the exception that no spindle supporting sleeves are furnished. Magnetic starter with overload and no-voltage protection is standard equipment. Starter is mounted on the pedestal, push-button station on the motor frame. Adjustable buffing hoods furnished, as extras, see page 46.

Also furnished in bench type, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	*Load Speed, R.P.M.	Diameter Shaft Bet. Flanges	Space Between Flanges	Distance Between Wheels	Height to Center of Spindle	Size of Base at Bottom	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
DKA	220-60-3	2	1750	1 1/4"	2 1/2"	34"	37 1/2"	25"x20"	375	500	KINK
DKA	440-60-3	2	1750	1 1/4"	2 1/2"	34"	37 1/2"	25"x20"	375	500	KAYAK
DLA	220-60-3	3	1750	1 1/4"	2 1/2"	34"	38"	25"x20"	400	525	KIT
DLA	440-60-3	3	1750	1 1/4"	2 1/2"	34"	38"	25"x20"	400	525	KAZOO
DMA	220-60-3	5	1750	1 1/4"	2 1/2"	40"	38"	25"x20"	425	550	KIMONO
DMA	440-60-3	5	1750	1 1/4"	2 1/2"	40"	38"	25"x20"	425	550	KODAK

Made in 2 or 3 phase only; also for 550 volts. If 2 phase or odd cycles is desired, mention after code word  
Speed for 25 cycles, 1500 R.P.M.

For other than 50 or 60 cycles, see price sheet.

\*Alternating Current Buffers also furnished 3450 R.P.M. if desired.  
Specify voltage cycles and phase.

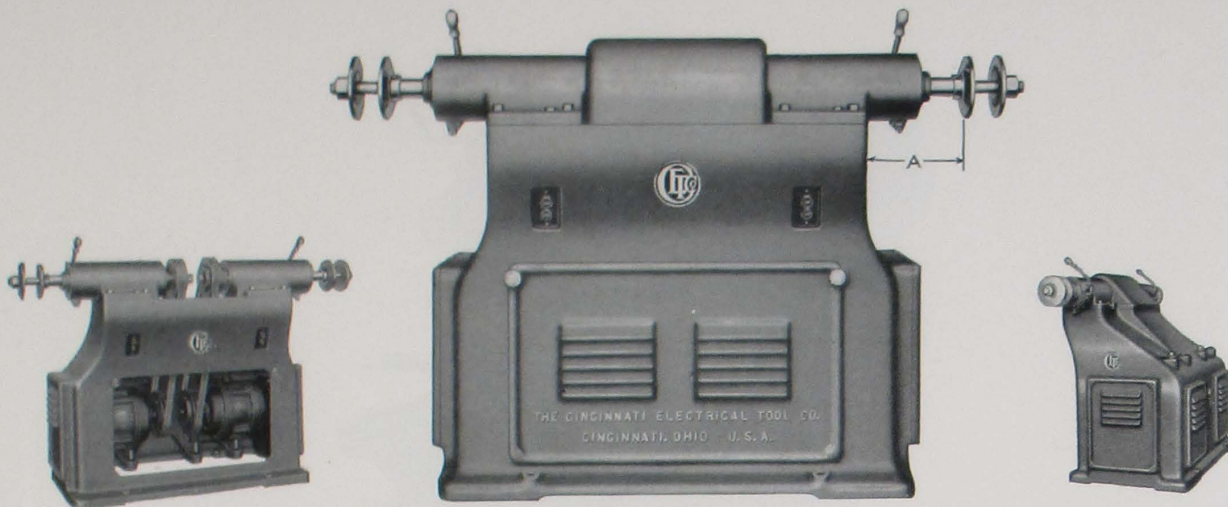
### DIRECT CURRENT SPECIFICATIONS

DK	115	2	1750	1 1/4"	2 1/2"	35"	38"	25"x20"	420	550	KNOT
DK	230	2	1750	1 1/4"	2 1/2"	35"	38"	25"x20"	420	550	KNACK
DL	115	3	1750	1 1/4"	2 1/2"	35"	39"	25"x20"	475	600	KNAVE
DL	230	3	1750	1 1/4"	2 1/2"	35"	39"	25"x20"	475	600	KNUR
DM	115	5	1750	1 1/4"	2 1/2"	40"	39"	25"x20"	525	650	KELP
DM	230	5	1750	1 1/4"	2 1/2"	40"	39"	25"x20"	525	650	KERITE

You should have an AIR MASTER with this Tool, see page 46.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



3, 5, 7½, 10 and 15 H. P. — Single and Double Motor

## Vee Belt Driven Buffing and Polishing Lathes

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

**V**EE-BELT Driven Buffers with overhanging spindles, especially designed for the heaviest polishing jobs on large and odd-shaped pieces.

Ball-bearing equipped motors are mounted on heavy columns in vee ways and are securely held in position by heavy clamps and adjustable screws on each motor.

Any spindle speed can be furnished, and speeds are quickly changed by merely changing the motor pulley only. Spindles are of nickel steel, machined to perfect balance, and are mounted in extra large ball-bearings running in oil, with labyrinth seals.

The bearing housings can be removed from the cabinet without disturbing the shafts or bearings. Perfect alignment is obtained by two large taper dowel pins.

Brake with external adjustment is provided for each individual spindle to facilitate the changing of buffing wheels.

Extra large cover plates on cabinet give easy access to motors, starters, belts, etc. Louvers in cover plates keep out dust and yet permit circulation of air so essential to long belt life.

Each individual motor has a magnetic starter with overload and low voltage protection, mounted in the cabinet, with push-button control.

Adjustable buffing hoods furnished, as extras, see page 46.

### SPECIFICATIONS SINGLE MOTOR DRIVE

Type	Volts	H.P.	Speed R.P.M.	Diam. of Shaft between Bearings	Diam. of Shaft between Flanges	Space between Flanges	Distance between Wheels	Length Spindle Overall	Dimen. "A"	Height to Center of Spindle	Size of Base at Bottom	No. of Ball Bearings	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
COA	220-60-3	3	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1300	1525	TREAT
COA	440-60-3	3	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1300	1525	TOAST
EOA	220-60-3	5	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1350	1570	TOKEN
EOA	440-60-3	5	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1350	1570	TITLE
GOA	220-60-3	7 1/2	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1550	1770	THORN
GOA	440-60-3	7 1/2	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1550	1770	TASTE
HOA	220-60-3	10	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1575	1790	TEACH
HOA	440-60-3	10	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1575	1790	TANGO
LOA	220-60-3	15	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1700	1900	TABLE
LOA	440-60-3	15	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1700	1900	TAFFY

### SPECIFICATIONS DOUBLE MOTOR DRIVE

DOA	220-60-3	Two 3	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1500	1720	TALLY
DOA	440-60-3	Two 3	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1500	1720	TRAIN
MOA	220-60-3	Two 5	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1575	1795	TOPAZ
MOA	440-60-3	Two 5	To Suit	27/16"	*1 1/4"	3"	51 3/4"	61 3/4"	9 3/4"	39"	34 1/2" x 24 1/4"	4	1575	1795	TORCH
NOA	220-60-3	Two 7 1/2	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1650	1870	TOWER
NOA	440-60-3	Two 7 1/2	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1650	1870	TOTAL
SOA	220-60-3	Two 10	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1775	2000	TREAD
SOA	440-60-3	Two 10	To Suit	27/16"	*1 1/4"	3"	54"	64"	9 3/4"	39"	45" x 27"	4	1775	2000	TRIBE

\*Can furnish Shaft 1 1/2" diameter without additional charge.

Dimension "A" can be furnished 17", see price sheet.

Made in 2 or 3 phase only; also for 550 volts. If 2 phase or odd cycles is desired, mention after code word.

Can also be furnished for Direct Current and odd cycles Alternate Current; prices on application. Specify voltage cycles and phase.

*You should have an AIR MASTER with this Tool, see page 46.*

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY



## Wet Abrasive Cut-Off Machine

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

THE CINCINNATI Wet Abrasive Cut-Off Machine is suitable for straight or angle cutting of practically any material encountered in general manufacturing, including steel alloys, non-ferrous metals such as brass, copper, aluminum, as well as fibrous and plastic materials in various sizes, angles and shapes.

THE CINCINNATI Wet Cut-Off Machine not only greatly increases the life of the abrasive cut-off wheels, but also produces a cut with a minimum of burr and eliminates burning, as the coolant is directed not only on the point of contact of the cut, but on the sides of the wheel as well.

Abrasive cut-off wheels are not regularly furnished, but can be supplied on order.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Wheel Size	Diameter of Shaft between Flanges	Spindle Speed	Peripheral Speed	Height Overall	Size of Base at Bottom	Net Weight Pounds	Ship. Weight Pounds	Code Word
JCAW	220-60-3	7½	16"x1½"	1"	2300	9500 S.F.M.	59"	33½"x23½"	1625	2050	GALIOT
JCAW	440-60-3	7½	16"x1½"	1"	2300	9500 S.F.M.	59"	33½"x23½"	1625	2050	GALENA

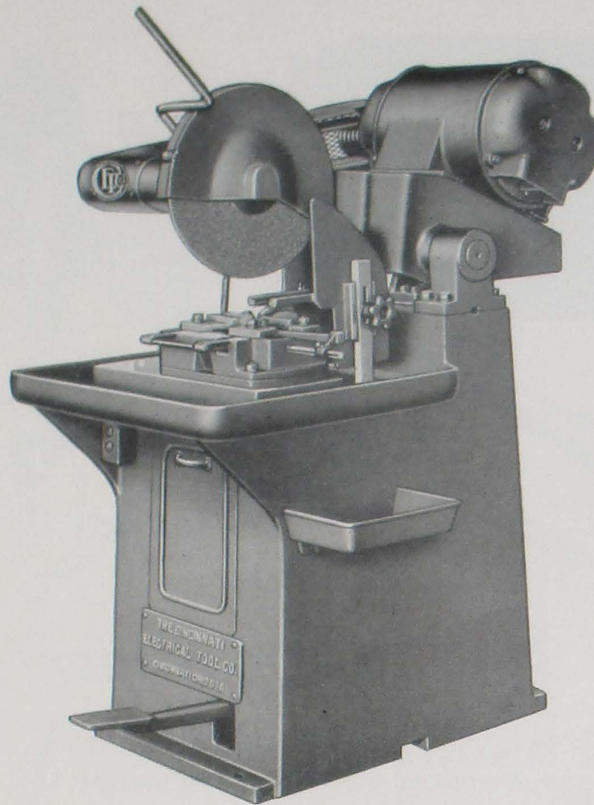
Made in 2 or 3 phase only. If 2 phase or 550 volts AC is desired, mention after code word.  
An additional charge is made for motors of other current characteristics. Prices on application.  
Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

JCW	115	7½	16"x1½"	1"	2300	9500 S.F.M.	59"	33½"x23½"	1675	2095	GAMBIT
JCW	230	7½	16"x1½"	1"	2300	9500 S.F.M.	59"	33½"x23½"	1675	2095	GASIFY

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



THE CINCINNATI Wet Abrasive Cut-Off Machine is suitable for making straight or angle cuts in solids up to  $2\frac{1}{4}$ " or tubing up to  $3\frac{1}{2}$ " diameter, the same vise being suitable for the various cuts. In cutting angles up to  $45^\circ$  the maximum capacity is  $2\frac{1}{4}$ ". Graduations on the table make angle-cutting fast and accurate. The material is held in the vise by spring tension on the jaws and the work is released after the cut is completed by the foot lever, leaving the operator's hands free at all times. The work is held securely on both sides of the cut, eliminating the possible cramping of work and preventing wheel breakage. The abrasive wheel is moved into the work by means of a hand lever and the arm which carries the abrasive wheel pivots on the pedestal with a counterbalance for easy operation. The abrasive cut-off wheel is completely guarded, with exception of that portion necessary for the actual cutting operation, affording perfect protection to the operator.

A stop is provided which can be set for any depth of cut within the machine's capacity, and a longitudinal stop is provided for regulating the length of the material to be cut.

Three sets of wheel flanges, in different sizes, are furnished to ensure the maximum use of the abrasive wheels. A shaft locking device facilitates changing of wheels. The coolant system consists of a  $\frac{1}{4}$  H.P. direct motor driven centrifugal pump with ten-gallon tank, piping and conveniently located control valve.

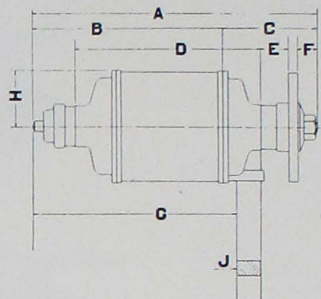
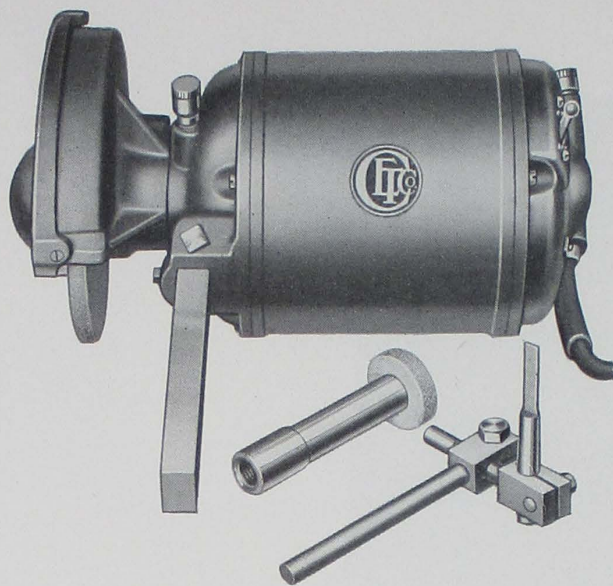
The spindle is of nickel steel, mounted on sealed-type deep-groove ball bearings running in oil. Labyrinth seals are provided to prevent the ingress of grit or dirt into the bearing housings. A conveniently located drain plug facilitates oil renewal. The spindle is driven by multiple vee belts from a  $7\frac{1}{2}$  H.P. Ball Bearing Drip-Proof Motor, 1,800 R.P.M., with magnetic starter with overload and no-voltage protection and push-button control. Can also be furnished with 10 H.P. motor, price on application.

THESE PIECES CUT WITH THE CINCINNATI HIGH SPEED CUT-OFF MACHINE



*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY



Type	A	B	C	D	E	F	G	H	J
P	11 1/4	7 1/8	3 3/8	7 5/8	1 3/8	1 1/2	7 3/4	2 1/4	1 x 5/8
PA	11 1/4	7 1/8	3 3/8	7 3/4	1 1/4	1 1/2	7 1/4	2 3/8	1 x 5/8
PHA	13 1/4	8 5/8	4 1/8	7 1/2	1 1/4	1 1/2	9 1/4	3 1/8	1 1/4 x 3/4
POA	16 1/4	10 1/8	6 1/8	10 1/8	1 1/8	1 1/2	6 3/4	3 1/8	1 3/4 x 1 1/2

## Tool Post Grinder

### Without Feed

#### Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, Give Cycles and Phase.

TOOL POST GRINDER without feed is designed for use on lathes with compound rest and is suitable for grinding lathe centers, reamers, dies, rolls, etc. The shank is of steel and has a round end, permitting the motor to be set at any angle. A double row ball bearing provides for radial as well as thrust load on grinding wheel end of shaft, with a deep-groove single-row plate seal ball bearing on other end. Bearings are protected by labyrinth seals against the ingress of dust and grit. Extension mandrel is used for internal grinding. Standard lengths of internal grinding mandrels are 4 1/8" for 1/4 H.P. Grinders and 7" for 1/2 H.P. Grinders. Special length mandrels can be furnished on order. Tooth rest serves as an index for grinding cutters, reamers, etc.

Furnished complete with rubber-covered cable and attachment plug. Tooth rest and Extension Mandrel not furnished as Standard Equipment but can be supplied on order. See price sheet.

#### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed, R. P. M.	Size External Wheel	Size Internal Wheel	Diameter Shaft Bet. Flanges	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
PA	110-60-1	1/4	3450	6"x1 1/2"	1 1/2"x3/8"x3/8"	1 1/2"	35	45	FABLE FORBID FABRIC FORD BELT OLIVE
*PA	220-60-1	1/4	3450	6"x1 1/2"	1 1/2"x3/8"x3/8"	1 1/2"	35	45	
PHA	110-60-1	1/2	3450	8"x1"	2"x1 1/2"x1 1/2"	5/8"	45	65	
†PHA	220-60-1	1/2	3450	8"x1"	2"x1 1/2"x1 1/2"	5/8"	45	65	
POA	110-60-1	1	1750	10"x1"	Furnished on Order	3/4"	95	145	
†POA	220-60-1	1	1750	10"x1"	Furnished on Order	3/4"	95	145	

\*Can also be furnished for 220 volts, 3 phase, regular list price.

†Can also be furnished for 220 volts, or 440 volts, 3 phase, regular list prices.

For other voltage and cycles, Price on application.

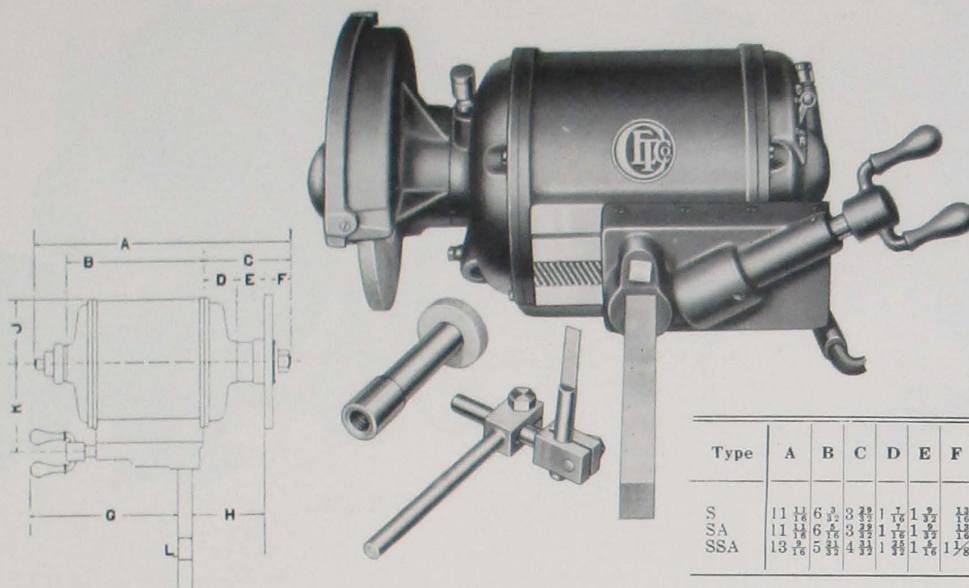
Specify voltage cycles and phase.

#### DIRECT CURRENT SPECIFICATIONS

P	115	1/4	3650	6"x1 1/2"	1 1/2"x3/8"x3/8"	1 1/2"	22	32	ESSAY ESTEEM
P	230 (Specify)	1/4	3650	6"x1 1/2"	1 1/2"x3/8"x3/8"	1 1/2"	22	32	

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# THE CINCINNATI ELECTRICAL TOOL COMPANY



Type	A	B	C	D	E	F	G	H		J	K	L
								Min.	Max.			
S	11 1/4	6 1/2	3 1/2	1 1/2	1 1/2	1 1/2	6 3/4	1 1/4	4	2 1/2	3 1/2	1 x 3/8
SA	11 1/4	6 1/2	3 1/2	1 1/2	1 1/2	1 1/2	6 3/4	1 1/4	4 3/4	2 1/2	3 1/2	1 x 3/8
SSA	13 1/4	5 3/4	4 1/2	1 1/2	1 1/2	1 1/2	8	1 1/4	5	3 1/2	5 1/2	1 1/4 x 3/4

## Tool Post Grinder

### With Horizontal Feed

TOOL POST GRINDER, with feed especially adapted for grinding lathe centers, cutters, reamers, rolls, dies, etc., can also be used in shaper or planer for surface grinding. The shank is of steel and has a round end, permitting the motor to be set at any angle. The motor has a 3-inch horizontal travel through the V-slide by means of a worm, and is fitted with a gib to take up the wear. A double row precision ball bearing provides for radial as well as thrust load on the grinding-wheel end of shaft, with a deep-groove, single-row plate seal ball bearing on the other end. Bearings are protected by labyrinth seals against the ingress of dust and grit. Extension mandrel is used for internal grinding. Standard lengths of internal grinding mandrels are 4 1/8" for 1/4 H.P. Grinders and 7" for 1/2 H.P. Grinders. Special length mandrels can be furnished on order. Tooth rest serves as an index for grinding cutters, reamers, etc.

Furnished complete with rubber-covered cable and attachment plug. Tooth Rest and Extension Mandrel not furnished as Standard Equipment but can be supplied on order, see price sheet.

### ALTERNATING CURRENT SPECIFICATIONS

Type	Volts	H. P.	Load Speed, R. P. M.	Size External Wheel	Size Internal Wheel	Diameter Shaft Bet. Flanges	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
SA	110-60-1	1/4	3450	6"x1 1/2"	1 1/2"x3 3/8"x3 3/8"	1 1/2"	40	50	<b>FACTOR FALTER FAGOT FAMISH</b>
*SA	220-60-1	1/4	3450	6"x1 1/2"	1 1/2"x3 3/8"x3 3/8"	1 1/2"	40	50	
SSA	110-60-1	1/2	3450	8"x1"	2"x1 1/2"x1 1/2"	1 1/2"	55	75	
†SSA	220-60-1	1/2	3450	8"x1"	2"x1 1/2"x1 1/2"	1 1/2"	55	75	

\*Can also be furnished for 220 volts, 3 phase, regular list price.

†Can also be furnished for 220, or 440 volts, 3 phase, regular list price.

For other voltage and cycles, Price on application.

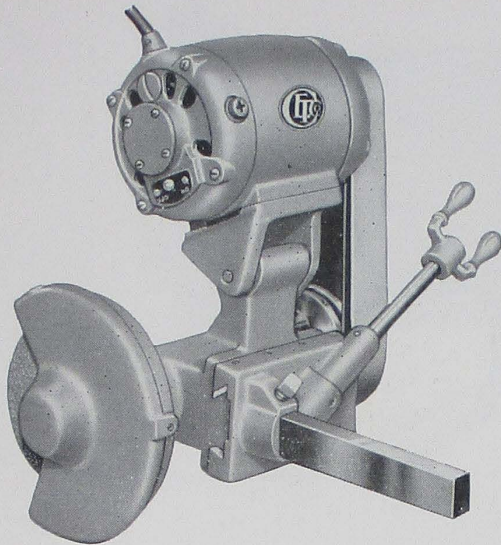
Specify voltage cycles and phase.

### DIRECT CURRENT SPECIFICATIONS

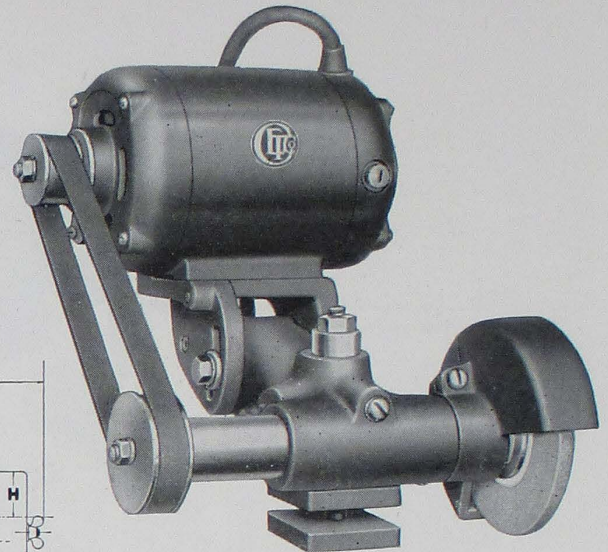
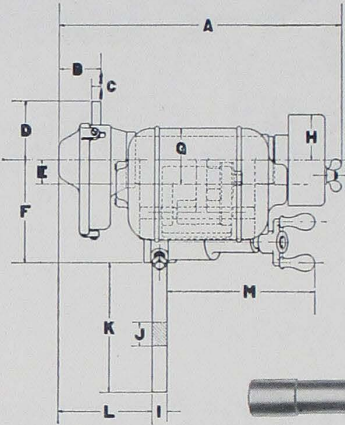
S	115	1/4	3650	6"x1 1/2"	1 1/2"x3 3/8"x3 3/8"	1 1/2"	27	37	<b>ETHER EULOGY</b>
S	230 (Specify)	1/4	3650	6"x1 1/2"	1 1/2"x3 3/8"x3 3/8"	1 1/2"	27	37	

*The Cincinnati*  
TRADE MARK

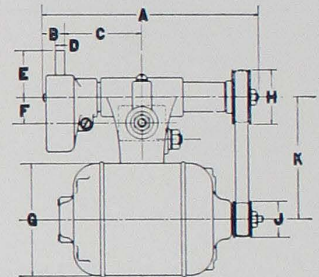
# THE CINCINNATI ELECTRICAL TOOL COMPANY



TYPE FU



TYPE LBU



Type	A	B	C	D	E	F	G	H	I	J	K	L Min. Max.	M
FU	12"	1 3/4"	3/8"	2 1/2"	1 1/2"	4 3/8"	2 1/2"	1 1/2"	5/8"	1"	5 1/8"	2 7/8"	5 5/8"
LU	12"	1 3/4"	3/8"	2 1/2"	1 1/2"	3"	2 1/2"	1 1/2"	5/8"	1"	5 1/8"		

Type	A	B	C	D	E	F	G	H	J	K
LBU	9 1/4"	1 1/2"	3 1/2"	3/8"	2"	1 1/8"	4 1/2"	2 1/4"	1 1/2"	5 1/8"

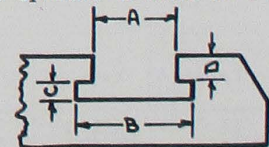
## Ball Bearing Tool Post Grinders

Universal Motor for Direct and Alternating Current, 25 to 60 Cycles, Single Phase.

**T**YPES FU and LU Belt Driven Tool Post Grinders, with and without feed respectively, especially adapted for grinding lathe centers, cutters, reamers, rolls, dies, etc.; can also be used in a shaper or planer for surface grinding. Offset spindle construction affords maximum clearance across the face of the grinding wheel. Pivotal mounting of motor on bracket provides for maintenance of proper belt tension. Type FU has a 3" horizontal travel through the V slide by means of a worm and is fitted with a gib to take up the wear. Internal grinding mandrel is 4 1/8" long.

**T**YPE LBU Belt-driven Grinder, for mounting on compound rest of 9" lathes and larger, will grind work within 2 1/2" of the maximum lathe swing. Grinder may be swivelled around the clamping bolt and provision is made for changing spindle height. Motor is adjustable, for maintaining proper belt tension. Distance from center of spindle to center of tool rest is 1 1/8". Minimum distance from the center of spindle to base is 1". Internal grinding mandrel is 4 1/8" long.

In ordering, give dimensions of slot in compound rest, so that proper adaptor may be furnished.



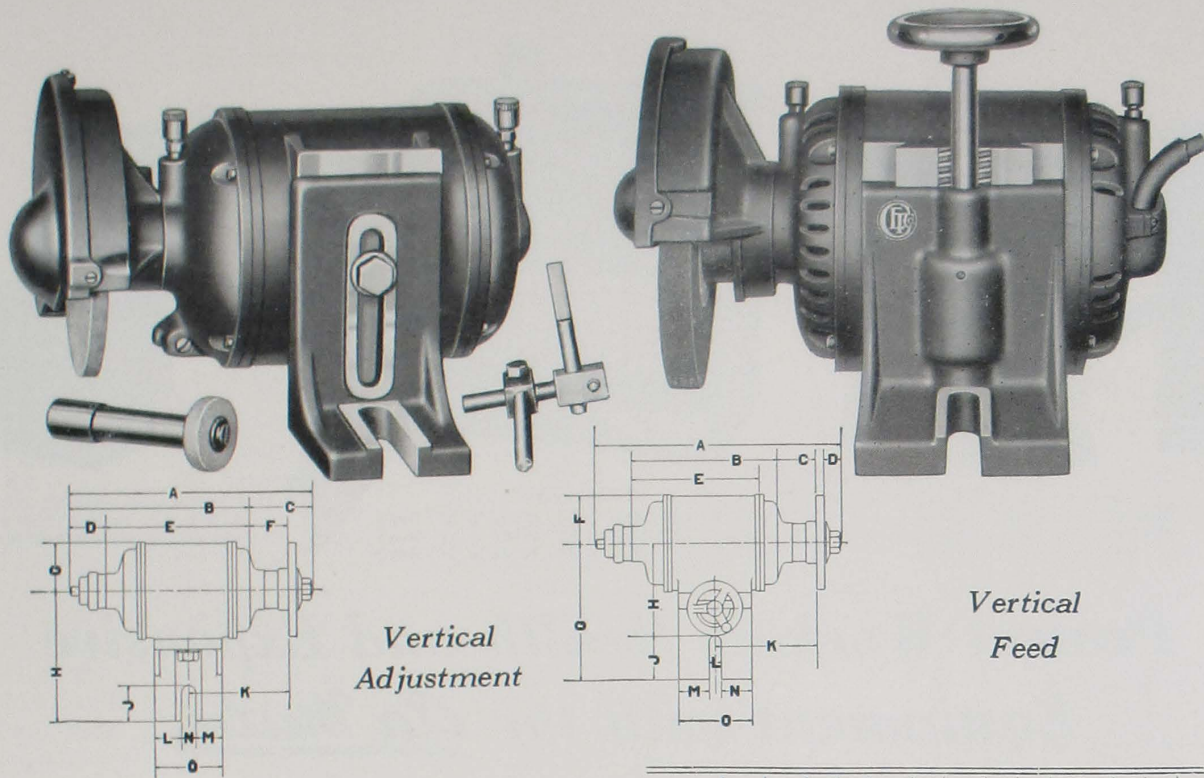
Furnished complete as illustrated with rubber-covered cable, attachment plug and internal mandrel.

### SPECIFICATIONS

Type	Volts (Specify)	H. P.	Load Speed R. P. M.	Size External Wheel	Size Internal Wheel	Diameter Shaft Between Flanges	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
FU with feed	110	1/2	3450	5" x 3/8"	1 1/2" x 3/8" x 3/8"	1 1/2"	33	50	BACON
FU with feed	220	1/2	3450	5" x 3/8"	1 1/2" x 3/8" x 3/8"	1 1/2"	33	50	BEAR
LU without feed	110	1/2	3450	5" x 3/8"	1 1/2" x 3/8" x 3/8"	1 1/2"	29	46	BEAK
LU without feed	220	1/2	3450	5" x 3/8"	1 1/2" x 3/8" x 3/8"	1 1/2"	29	46	BEAL
LBU	110	1/2	6000	4" x 3/8"	1 1/2" x 3/8" x 3/8"	1 1/2"	20	30	BAHIA
LBU	220	1/2	6000	4" x 3/8"	1 1/2" x 3/8" x 3/8"	1 1/2"	20	30	BEAU

*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY



Vertical  
Adjustment

Vertical  
Feed

Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O
TPA	11	11	8	11	3	1	1	1	1	1	1	1	1	1

Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O
TA	13	13	7	1	6	3	9	6	2	5	1	1	1	1
TTA	16	16	9	2	8	3	10	6	2	5	1	1	1	1
TVA	23	23	12	3	11	5	12	6	2	5	1	1	1	1
TFA	23	23	12	3	11	5	12	6	2	5	1	1	1	1

## Angle Plate Grinders

Alternating Current Only

Order by Type, Volts, Cycles and Phase.

**A**NGLE-PLATE GRINDERS, especially adapted for grinding spindles, rolls, journals, bushings, connecting rods and surfaces. For use on lathes, planers, shapers and boring mills. A double row precision ball bearing is provided on the grinding wheel end of shaft to take care of both radial as well as thrust loads, with a deep groove single-row plate seal ball bearing on the opposite end. The 1/4 H.P. Grinder has no vertical feed, but can be swiveled to any angle by means of the set-screw and slot in the angle plate. Grinders of 1/2 H.P. to 3 H.P. have vertical feed of 4 3/4" to 9 1/2", according to size.

Furnished complete with electric cable and attachment plug. Tooth Rest and Extension Mandrel for 1/4 and 1/2 H.P. Grinders can be supplied as extras. See price sheet under Tool Post Grinders.

### SPECIFICATIONS

Type	Volts	H. P.	Load Speed R. P. M.	Size Wheel	Diameter Shaft Bet. Flanges	Net Weight, Pounds	Shipping Weight, Pounds	Code Word
TPA	110-60-1	1/4	3450	6"x 1 1/2"	1 1/2"	32	50	CANAL
†TPA	220-60-1	1/4	3450	6"x 1 1/2"	1 1/2"	32	50	CABIN
TA	110-60-1	1/2	3450	8"x 1"	1 1/2"	60	85	FORTIFY
†TA	220-60-1	1/2	3450	8"x 1"	1 1/2"	60	85	FRAY
TTA	110-60-1	1	1750	10"x 1"	3 3/4"	100	140	FOSIL
†TTA	220-60-1	1	1750	10"x 1"	3 3/4"	100	140	FRESCO
*TVA	220-60-3	2	1750	12"x 1 1/2"	1 1/4"	280	350	FRIGATE
*TVA	440-60-3	2	1750	12"x 1 1/2"	1 1/4"	280	350	FARINA
*TFA	220-60-3	3	1750	14"x 2"	1 1/4"	300	370	FROCK
*TFA	440-60-3	3	1750	14"x 2"	1 1/4"	300	370	FELLOE

‡Can also be furnished for 220 volts, 3 phase, regular list price.

†Can also be furnished for 220, or 440 volts, 3 phase, regular list price.

For other voltage and cycles, Price on application.

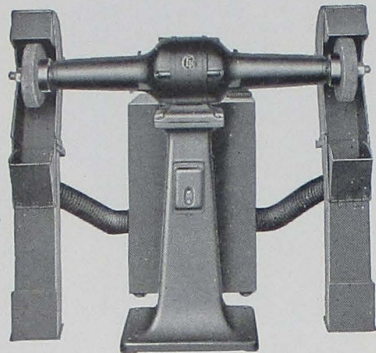
\*Made in 2 or 3 phase only. If 2 phase or 550 volts is desired, mention after code word.

Speed for 25 cycles, 1500 R.P.M.

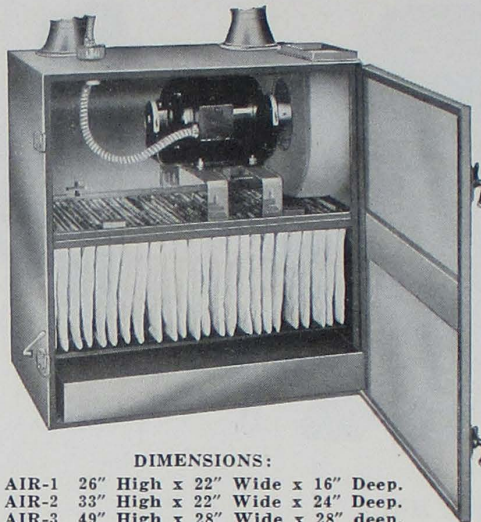
Specify voltage cycles and phase.

*The Cincinnati*

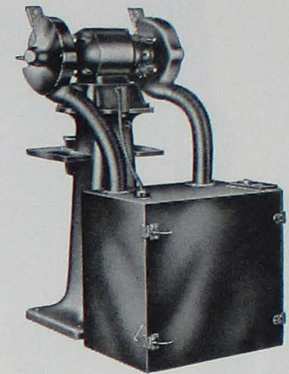
# THE CINCINNATI ELECTRICAL TOOL COMPANY



Buffer with AIR-2 Air Master, Adjustable Hoods and Piping. For hoods and piping prices, see price sheet.



**DIMENSIONS:**  
AIR-1 26" High x 22" Wide x 16" Deep.  
AIR-2 33" High x 22" Wide x 24" Deep.  
AIR-3 49" High x 28" Wide x 28" Deep.



Pedestal Grinder with AIR-1 Air Master and piping. For piping price, see price sheet.

## Protect Workers Health and Expensive Equipment with the *Air Master*

Alternating Current — Direct Current

Order by Type, Current and Volts. If Alternating Current, give Cycles and Phase.

THE CINCINNATI "Air Master" is an efficient self-contained dust collector unit, urgently needed in every plant where grinding, polishing or buffing, of any kind, is done. Suitable for use with bench and pedestal grinders and buffers, tool and cutter grinders, surface grinders, lathe grinders, disc grinders, etc. The dust and grit laden air is thoroughly filtered, through a series of closely woven fabric and steel wool filter bags and exhausted through an opening, in the top of the cabinet.

The heavier particles are directed downward, by means of a baffle plate, falling immediately into a large tray in the bottom of the cabinet. A foot lever is provided for shaking the lighter particles, from the filter bags, into the tray, which is removable for easy cleaning.

The fan motor is regularly connected into the same switch, which controls the grinder or buffer, starting and stopping simultaneously, with the machine. A metal partition prevents entrance of dust and grit into the motor compartment.

The motor, suction fan and filter bags are all completely enclosed in a compact, lacquer finished, insulated cabinet, mounted on rubber feet, ensuring quiet operation.

Type AIR-1 Air Master, with two 2" inlets, is recommended for use with 6", 8" and 10" Bench and Pedestal Grinders. When equipped with one 3" inlet, is ideal for small Tool and Cutter and Surface Grinders, also small Abrasive Cut-Off Machines.

Type AIR-2 Air Master, with two 3" inlets, will be found ideally suited for 12" and 14" Pedestal and Disc Grinders, as well as light buffing and polishing operations. When one 4" inlet is used, it is adaptable to the larger Tool and Cutter and Surface Grinders, as well as Abrasive Cut-Off Machines, where greater capacity than the Air-1 is desired.

Type AIR-3 Air Master, with two 4" inlets, is suggested for use with Pedestal and Disc Grinders up to 24" wheel size, also for production buffing installations. This unit can also be had with one 6" inlet, for use with single end disc grinders up to 30 inch, or for several smaller units.

### SPECIFICATIONS

Type	Motor H. P.	Motor R. P. M.	Adjustable Hood Size Recommended	Capacity C. F. M. *	Velocity Each Inlet F. P. M.	Grinding Wheel Size Recommended	Standard Inlets	Net Weight	Shipping Weight	Code Word
AIR 1	1/2	3450	None	235*	5400	Up to two 10"x1 1/4"	Two 2"	105	150	AMBLE
AIR 2	3/4	3450	Up to two 12"	530*	5400	Up to two 14"x3"	Two 3"	145	200	AGAPE
AIR 3	1 1/2	3450	Up to two 18"	930*	5300	Up to two 24"x4"	Two 4"	300	400	AIGRET

\*Total capacity, based on using two inlets, each inlet one half of total.

Can also be furnished for Direct Current and odd cycles Alternating Current; prices on application.

Specify voltage cycles and phase.

Piping, from exhaust outlets, on grinder wheel guards or buffer hoods, to AIR MASTER,

furnished as extra, see price sheet.

Recommended for all Grinding and Buffing Applications with wheel speeds up to 7500 surface feet per minute.

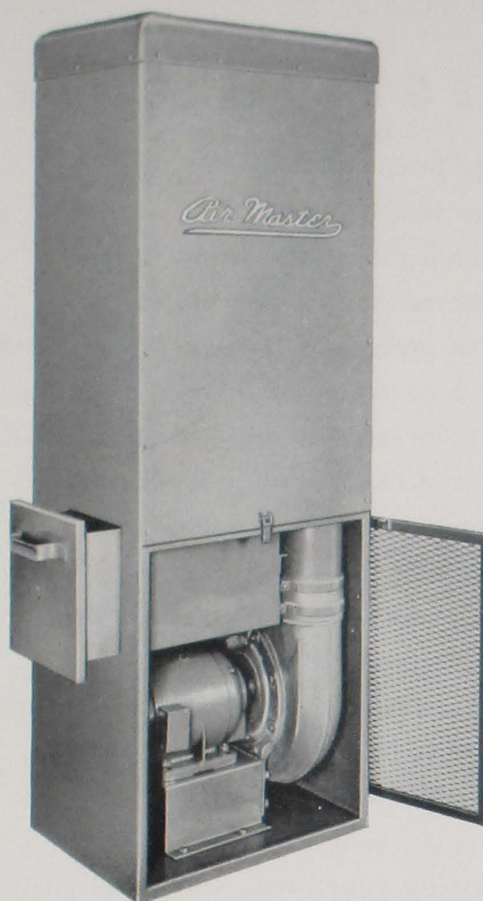
*The Cincinnati*

# THE CINCINNATI ELECTRICAL TOOL COMPANY

**Motor and Exhauster  
Completely Isolated  
From Dust.  
After-Cleaner Filters  
Easily and Quickly  
Accessible.**

## DIMENSIONS

	Height	Width	Depth
AIR-2C	62½"	16"	20"
AIR-C	72½"	20"	26"
AIR-4C	72½"	26"	40"



## CONSTRUCTION

The Extra heavy housings of these units are ⅛" sheet steel, welded construction, for greater rigidity and durability. Exhausters are heavy duty industrial type, direct connected to a 3600 rpm, A.C. motor. The motor is amply ventilated and readily accessible through a removable expanded metal panel. Dust receptacles are gasketed, sliding drawers, secured with a hand wheel to insure a leak-proof seal.

## Cyclone Type Dust Collector with After-Filter

THIS unit is a combination of a cyclone dust separator and a steel wool after-filter in one cabinet making two filter media in one cabinet for complete air cleaning which permits return of the cleaned air into the building.

In filter bag type air cleaners where heavy grinding overloads the filter bags or in buffing when using sticky compounds causing buffing lint to clog the filter bags, the combination cyclone dust collector is recommended. The cyclone separates 90 % of the dust leaving only the finer particles to be filtered through the steel wool filter in the final cleaning. As a result, maximum suction is always maintained and the steel wool filter requires very little cleaning attention.

Recommended for all Grinding and Buffing applications with wheel speeds up to 7500 surface feet per minute.

## SPECIFICATIONS

Type	Motor HP	Current	Capacity CFM	Capacity at Approx. 2½" w.g.	Wheel Size Recommended	Net Weight	Gross Weight	Code Word
AIR-2C	¾	50 or 60 cy. 1, 2 or 3 phase	450	1-5" pipe†	Up to two 14" x 3"	285#	380#	AUGER
AIR-C	1½	50 or 60 cy. 2 or 3 phase	900	1-6" pipe†	Up to two 24" x 4"	470#	560#	AMBER
AIR-4C	3*	50 or 60 cy. 2 or 3 phase	1800	2-6" pipes†	Up to two 30" x 3"	710#	825#	ALLEY

\*Type AIR-4C is equipped with magnetic starter and separate push button station. Type AIR-2C and AIR-C are designed for electrical connection to the machine being served.

†A combination of smaller diameter outlets can be furnished. Price on application.

For other than above current specifications, price on application.  
Specify voltage cycles and phase.

*The Cincinnati*  
TRADE MARK

# THE CINCINNATI ELECTRICAL TOOL COMPANY

## TELEGRAPH CODE

DIAMOND.....	Wire price and delivery
RUBY.....	Wire best delivery
EMERALD.....	Enter order and ship via freight
PEARL.....	Enter order and ship via express
MOSAIC.....	Enter order and ship via Air Express
SAPPHIRE.....	Enter order and ship via parcel post
AMETHYST.....	Enter order and ship via parcel post special delivery
SARDONYX.....	Enter order and ship via Air Mail
CORAL.....	Enter order and wire delivery
MOONSTONE.....	Wire shipping date order
OPAL.....	When and how did you ship order?
QUARTZ.....	Trace shipment of order
CRYSTAL.....	Please hold order for further instructions
ONYX.....	Have you shipped order?
AQUAMARINE.....	Shipping your order via freight
TURQUOISE.....	Shipping your order via express
CAMEO.....	Shipping your order via parcel post
GARNET.....	Shipping your order via parcel post special delivery
JADE.....	Shipping your order via Air Mail

## GUARANTEE

Every electric tool has been carefully inspected before shipment and we guarantee to correct any defect due to faulty material or workmanship. Our obligation assumed under this guarantee is limited to making replacement of any part or parts returned to us at our factory, or to our authorized service stations, transportation charges prepaid, which prove to our satisfaction upon examination to have been defective and have not been misused or carelessly handled. We reserve the right to decline responsibility where repairs have been made or attempted by others. This guarantee is in lieu of any other liability on our electric tools or parts. None other is authorized.

THE CINCINNATI ELECTRICAL TOOL CO.

DIVISION OF THE R. K. LE BLOND MACHINE TOOL CO.

CINCINNATI 8, OHIO — U. S. A.

*The Cincinnati*  
TRADE MARK



**Botwinik Brothers of Mass. Inc**  
**NEW • USED • REBUILT MACHINE TOOLS**  
2 Sherman Street, Worcester, Mass.  
Telephone 6-5175



## THE CINCINNATI ELECTRICAL TOOL CO.

DIVISION OF THE R. K. LEBLOND MACHINE TOOL CO.

**CINCINNATI 8, OHIO, U. S. A.**

### DISTRICT SALES OFFICES

TOLEDO	NEW YORK	ST. CATHERINES, ONT.
BOSTON	PITTSBURGH	BINGHAMTON, N. Y.
DETROIT	KANSAS CITY	PORTLAND, ORE.
MEMPHIS	MINNEAPOLIS	SAN FRANCISCO
ST. LOUIS	PHILADELPHIA	ORLANDO, FLA.
CHICAGO	NEW BRAUNFELS, TEX.	INDIANAPOLIS

# The Cincinnati

MAY 1, 1953

## Price Sheet No. 33

All prices are subject to change without notice.

## THE CINCINNATI ELECTRICAL TOOL COMPANY

Division of The R. K. Le Blond Machine Tool Co.  
CINCINNATI 8, OHIO

Page No.

### ELECTRIC DRILLS

Class

2	Type UL	1/4" Standard Duty	\$36.00 A
	Type ULS	1/4" Heavy Duty	49.00 A
	Type UAS	1/4" Heavy Duty	54.00 A
	Type UBS	5/8" Heavy Duty	59.00 A
	Type UK	3/8" Heavy Duty	60.00 A
3	Type UO	1/2" Standard Duty	66.00 A
4	Type UT	3/8" Heavy Duty	65.00 A
	Type UH	1/2" Heavy Duty	85.00 A
	Type UE	5/8" Heavy Duty	90.00 A
	Type UW	3/4" Heavy Duty	119.00 A
5	Type UD	1/2" Heavy Duty 2-Speed	100.00 A
	Type UED	3/4" Heavy Duty 2-Speed	103.00 A
6	Type UN	7/8" Heavy Duty	124.00 A
	Type UP	1" Heavy Duty	146.00 A
	Type UG	1 1/4" Heavy Duty	156.00 A

### BENCH AND POST DRILL STANDS

7	No. 10 Bench Drill Stand	\$23.00 A
	No. 12 Bench Drill Stand	32.00 A
	No. 00 Bench Drill Stand	44.00 A
	No. OOW Post Drill Stand	58.00 A

### TAPPING MACHINE

8	Type UJ	\$102.00 A
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### SCREW DRIVERS AND NUT SETTERS

9	Type N1	\$76.00 A
	Type N2	81.00 A
	Reversing Switch	11.00 A

### BITS, SOCKETS AND ADAPTERS

Bit with centering sleeve	\$ 2.20 A
Bit without centering sleeve	1.10 A
Adaptor for hexagon or square sockets	1.65 A

#### Square Sockets

Class	Class
5/8", \$1.55 A	5/8", \$1.85 A
3/8", 1.55 A	1 1/8", 1.85 A
1/2", 1.55 A	3/4", 1.85 A
1/4", 1.55 A	1 1/4", 2.20 A
3/16", 1.55 A	7/8", 2.20 A

#### Hexagon Sockets

Class	Class
3/8", \$1.45 A	1 1/8", \$1.55 A
1/2", 1.45 A	3/4", 1.55 A
1/4", 1.45 A	1 1/4", 1.55 A
3/16", 1.45 A	7/8", 1.90 A
1/8", 1.45 A	1 1/2", 1.90 A
	5/8", 1.45 A

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### GRINDING STAND

Class

10	For Types ULS, UAS, UBS and UK	\$ 5.50 A
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### GRINDING WHEELS AND ARBORS

10	For Drills 1/4" to 3/8" with wheel 3" x 1/2"	\$ 2.50 A
	For drills 1/2" to 3/4" with wheel 4" x 1/2"	3.60 A

### CHUCKS WITHOUT ARBOR

(Not shown in catalog)

1/4"	\$ 5.50 A	1/2"	\$ 8.00 A
5/8"	6.00 A	3/8"	9.50 A
3/8"	650 A	3/4"	12.00 A

### CHUCKS WITH MORSE TAPER ARBORS

10	1/2" Chuck with No. 2 or No. 3 Arbor	\$10.00 A
	5/8" Chuck with No. 2 or No. 3 Arbor	11.00 A
	3/4" Chuck with No. 2 or No. 3 Arbor	14.00 A

### FLEXIBLE LIGHT ARMS

10	For all Grinders, not installed on mach., each	5.00 A
	For all Grinders, installed on mach., each	7.00 *

### SHATTERPROOF EYE SHIELDS\*

10	Size 1—3 3/4" x 5 1/2", Pair	\$ 4.00 A
	Size 2—5 3/4" x 6 1/4", Pair	11.00 A

### ILLUMINATED EYE SHIELDS

10	Not mounted on machine, pair	\$18.00 A
	Mounted on machine but not wired, pair	26.50 *
	Mounted and wired through switch for 6", 7", 8" and 10" Machines, 110-60-1 phase, pair	37.00 *
	Mounted and wired through transformer and switch including transformer for all 220-440-550 volts, 60 cycle, 3-phase machines, pair	69.00 *

### FEED SCREW

10	For Drills 1/4" to 1 1/4"	\$ 8.00 A
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### TWIST DRILL GRINDING ATTACHMENT\*

10	For use on 6", 7", 8", 10" and 12" Grinders	\$36.00 A
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### WIRE WHEEL BRUSHES

10	ALL SIZES—PRICE ON APPLICATION SPECIFY DIAMETER, WIDTH & BORE
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\*When mounted, as extra, at factory, same product classification applies, as that of tool on which accessory is mounted.

Page No.

Class

# SEWED BLEACHED MUSLIN BUFFING WHEELS

- 10 ALL SIZES—PRICE ON APPLICATION  
SPECIFY DIAMETER, WIDTH & BORE

## GRINDING WHEELS

- 10 ALL SIZES—PRICE ON APPLICATION  
SPECIFY DIAMETER, WIDTH & BORE  
ALSO GRAIN AND GRADE

## SANDING AND POLISHING MACHINES

- 11 Type BN .....\$88.00 A  
Type EN .....105.00 A  
Type HN .....95.00 A

## ATTACHMENTS FOR SANDERS AND POLISHERS (Not shown in catalog)

- Lamb's Wool Bonnet, 7".....\$2.50 9".....\$3.00 A  
Felt Pads for Sanders, 7".....2.00 9".....2.50 A  
Flexible Backing Pad, 7".....8.00 9".....9.50 A  
Wire Cup Brush .....3.30 A  
Wire Cup Brush Adaptor .....2.50 A  
Adaptor for Flex Type Abrasive Discs .....3.50 A

## ABRASIVE DISCS

- Grit Nos. 150-80 60-50 36-30 24 16  
Size 7" PRICES ON APPLICATION  
Size 9" PRICES ON APPLICATION

## COAL DRILLS

- 12 Type LCU .....\$178.00 A  
Type CH .....225.00 A  
Type GCA .....250.00 A

## PORTABLE ROUTER

- 13 Type BR .....\$205.00 A

## ACCESSORIES FOR ROUTER

- 14 Stair Routing Template .....\$95.00 A

## HIGH SPEED STRAIGHT ROUTER BITS

- 15  $\frac{3}{8}$ " .....\$3.80 D  $\frac{1}{8}$ " .....\$7.00 D  
 $\frac{1}{2}$ " .....4.00 D  $\frac{7}{8}$ " .....7.70 D  
 $\frac{5}{8}$ " .....5.00 D 1" .....8.00 D  
 $\frac{3}{4}$ " .....5.50 D  $1\frac{1}{8}$ " .....9.00 D  
 $\frac{7}{8}$ " .....6.00 D  $1\frac{1}{4}$ " .....9.50 D  
 $\frac{3}{4}$ " .....6.50 D  $1\frac{3}{8}$ " .....10.00 D  
 $1\frac{1}{2}$ " .....\$11.50 D

Special sizes to order, price on application.

For bits with  $\frac{1}{2}$ " threaded shanks, for old model routers,  
add \$1.50 each, list and mention in order.

## $\frac{3}{4}$ " STAIR ROUTING BIT, 2° TAPER

- 15 With  $\frac{1}{2}$ " straight round shank .....\$ 6.50 D  
With  $\frac{1}{2}$ " threaded shank .....8.50 D

## INLAY BITS

- 15  $\frac{1}{8}$ " to  $\frac{1}{4}$ " by sixteenths, each .....\$ 1.25 D  
 $\frac{1}{8}$ " to  $\frac{1}{4}$ " by sixteenths, each .....1.65 D

## GUIDE COLLARS

- 15 For  $\frac{7}{8}$ ", 1",  $1\frac{1}{8}$ " and  $1\frac{1}{2}$ " tread stock, each.....\$ 3.00 A  
For  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ " and 2" tread stock, each .....4.00 A  
For use with  $\frac{1}{4}$ " shank inlay bits .....4.25 A

Page No.

Class

## SPLIT COLLETS

- 15  $\frac{1}{4}$ " or  $\frac{1}{2}$ " sizes, each .....\$ 2.00 A

## GRINDING WHEEL

- 15 2" x  $\frac{1}{4}$ " wheel and arbor .....2.20 A

## GRINDING PENCILS

- 15  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ " diameter, each .....\$ 1.00 A

## PORTABLE GRINDERS

- 16 Type AH 5".....\$98.00 A  
Type NSU 6".....120.00 A  
Type ASA 1 H.P. ....210.00 B  
Type ARA  $1\frac{1}{2}$  H.P. ....260.00 B  
For other than 50 or 60 cycles, increase price 15%

## INTERNAL GRINDERS — VERTICAL FEED

- 17 Type VA  $\frac{1}{2}$  H.P. ....\$300.00 B  
Type VVA 1 H.P. ....390.00 B  
For other than 50 or 60 cycles, increase price 15%

## SPEED LATHES

- 18 Type FBA 90 to 3400 R.P.M.....\$230.00 B  
For other than 50 or 60 cycles, increase price 10%  
Type FB 90 to 3400 R.P.M.....244.00 B  
For bench type, deduct \$29.00.

- 19 FBAB  $\frac{1}{8}$  H.P. 560,  $\frac{1}{4}$  H.P. 1150 R.P.M.....\$395.00 C  
FCAB  $\frac{1}{8}$  H.P. 850,  $\frac{1}{4}$  H.P. 1750 R.P.M.....395.00 C  
FDAB  $\frac{1}{4}$  H.P. 1750,  $\frac{1}{2}$  H.P. 3450 R.P.M.....395.00 C  
FBAC  $\frac{1}{8}$  H.P. 560,  $\frac{1}{4}$  H.P. 1150 R.P.M.....375.00 C  
FCAC  $\frac{1}{8}$  H.P. 850,  $\frac{1}{4}$  H.P. 1750 R.P.M.....375.00 C  
FDAC  $\frac{1}{4}$  H.P. 1750,  $\frac{1}{2}$  H.P. 3450 R.P.M.....375.00 C  
For bench type, deduct \$29.00.

- Round collets, up to 1", fractional sizes, each.....\$ 7.00 D  
Round collets, up to 1", decimal sizes each.....7.25 D  
Hex. collets up to  $\frac{3}{8}$ " fractional sizes each.....10.00 D

## BENCH AND PEDESTAL GRINDERS

- 20 Type KEA (Bench) 6" A.C.....\$42.00 A  
Type BBA (Bench) 6" A.C.....63.00 A  
Type PBA (Pedestal) 6" A.C.....100.00 A  
Type BB (Bench) 6" D.C.....86.00 A  
Type PB (Pedestal) 6" D.C.....123.00 A

## BENCH AND PEDESTAL GRINDERS (cont.)

- 21 Type KSA (Bench) 7".....92.00 A  
Type KPA (Pedestal) 7".....129.00 A  
Type KS (Bench) 7".....108.00 A  
Type KP (Pedestal) 7".....145.00 A  
Type VHA (Bench) 8".....101.00 A  
Type VPA (Pedestal) 8".....138.00 A  
22 Type KOA (Bench) 10".....145.00 B  
Type KOAP (Pedestal) 10".....190.00 B  
23 Type BHA (Bench) 8".....175.00 A  
Type FHA (Pedestal) 8".....220.00 A  
Type BOA (Bench) 10".....225.00 B  
Type FOA (Pedestal) 10".....277.00 B  
Type BO (Bench) 10".....245.00 B  
Type FO (Pedestal) 10".....297.00 B  
For other than 50 or 60 cycles, prices on application.

Page No.

Class

**GENERAL PURPOSE GRINDERS**

24-25	Type BPOA	(Bench) 1 H.P.	\$157.00	B
	Type GPOA	(Pedestal) 1 H.P.	198.00	B
	Type GPTA	(Bench) 2 H.P.	293.00	C
	Type GPTA	(Pedestal) 2 H.P.	305.00	C
	Type GPCA	(Bench) 3 H.P.	337.00	C
	Type GPCA	(Pedestal) 3 H.P.	349.00	C
	Type GPEA	(Bench) 5 H.P.	423.00	C
	Type GPEA	(Pedestal) 5 H.P.	435.00	C

**GENERAL PURPOSE 4-BEARING BUFFERS**

24-25	Type GPHA	(Bench) ¼ H.P.	\$165.00	B
	Type GPHA	(Pedestal) ¼ H.P.	198.00	B
	Type GPAA	(Bench) 1 H.P.	187.00	B
	Type GPAA	(Pedestal) 1 H.P.	220.00	B
	Type GPBA	(Bench) 2 H.P.	308.00	C
	Type GPBA	(Pedestal) 2 H.P.	320.00	C
	Type GPFA	(Bench) 3 H.P.	383.00	C
	Type GPFA	(Pedestal) 3 H.P.	395.00	C
	Type GPGA	(Bench) 5 H.P.	473.00	C
	Type GPGA	(Pedestal) 5 H.P.	485.00	C

**GENERAL PURPOSE 2-BEARING BUFFERS**

24-25	Type GPJA	(Bench) ¼ H.P.	\$137.00	B
	Type GPJA	(Pedestal) ¼ H.P.	170.00	B
	Type GPDA	(Bench) 1 H.P.	157.00	B
	Type GPDA	(Pedestal) 1 H.P.	190.00	B
	Type GPKA	(Bench) 2 H.P.	256.00	C
	Type GPKA	(Pedestal) 2 H.P.	268.00	C
	Type GPLA	(Bench) 3 H.P.	298.00	C
	Type GPLA	(Pedestal) 3 H.P.	310.00	C
	Type GPMA	(Bench) 5 H.P.	337.00	C
	Type GPMA	(Pedestal) 5 H.P.	349.00	C

**GENERAL PURPOSE COMBINATION GRINDERS AND BUFFERS**

24-25	Type GPQA	(Bench) ¼ H.P.	\$165.00	B
	Type GPQA	(Pedestal) ¼ H.P.	198.00	B
	Type GPRA	(Bench) 1 H.P.	187.00	B
	Type GPRA	(Pedestal) 1 H.P.	220.00	B
	Type GPSA	(Bench) 2 H.P.	298.00	C
	Type GPSA	(Pedestal) 2 H.P.	310.00	C
	Type GPVA	(Bench) 3 H.P.	353.00	C
	Type GPVA	(Pedestal) 3 H.P.	365.00	C
	Type GPWA	(Bench) 5 H.P.	443.00	C
	Type GPWA	(Pedestal) 5 H.P.	455.00	C

- 24-25 For 25 Cycles (2 or 3 phase) Add as follows:  
 1, 2, or 3 H. P. ....20% to List Price  
 5 H. P. ....Price on Application  
 For Single Phase (50 or 60 Cycles) Over 1  
 H. P. Add as Follows:  
 2 or 3 H. P. ....20% to List Price  
 5 H. P. ....30% to List Price  
 For Single Phase (25 Cycles) —  
 Price on Application

**BENCH AND PEDESTAL GRINDERS**

26	Type BTA	(Bench) 12"	\$343.00	C
	Type FTA	(Pedestal) 12"	360.00	C
	Type VCA	(Bench) 14"	413.00	C
	Type FCA	(Pedestal) 14"	430.00	C

For other than 50 or 60 cycles, price on application.  
 For single phase, increase price 20%

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Class

**HEAVY DUTY PEDESTAL GRINDERS**

27	Type HTA	12"	\$495.00	C
	Type HCA	14"	550.00	C
	Type HEA	14"	615.00	C
	Type FFA	18"	750.00	C
	For other than 50 or 60 cycles, increase price 15%			
	Type HT	12"	660.00	C
	Type HC	14"	700.00	C
	Type HE	14"	Price on Application	C
	Type FF	18"	Price on Application	C

For 12 and 14 Inch Bench Grinders, deduct \$14.00 from above prices.

For boiler plate guards, increase prices 15% net.

**COMBINATION WET AND DRY GRINDERS**

28	Type WTA	2 H.P.	\$625.00	C
	Type WGA	3 H.P.	650.00	C
	For other than 50 or 60 cycles, increase price 15%			
	Type WT	2 H.P.	Price on Application	C
	Type WG	3 H.P.	Price on Application	C
	Surface grinding attachment			65.00 C

**WIDE TYPE PEDESTAL GRINDERS**

29	Type WAA	8"	\$295.00	A
	Type WBA	10"	415.00	B
	Type WSA	12"	550.00	C
	Type WCA	14"	615.00	C
	Type WFA	14"	695.00	C
	For other than 50 or 60 cycles, increase price 15%			
	Type WS	12"	Price on Application	C
	Type WC	14"	Price on Application	C
	Type WF	14"	Price on Application	C

For ½ H.P. bench type, deduct \$29.00; for 1 H.P., \$44.00.

For boiler plate guards, increase prices 15% net.

**COMB. PEDESTAL GRINDERS AND BUFFERS**

30	Type KHA	8"	\$244.50	A
	Type KRA	10"	355.00	B
	Type KTA	12"	530.00	C
	Type KVA	14"	645.00	C
	For other than 50 or 60 cycles, increase price 15%			
	Type KT	12"	Price on Application	C
	Type KV	14"	Price on Application	C
	For ¾ H.P. bench type, deduct \$29.00 for 1 H.P., \$44.00			

**HEAVY DUTY PEDESTAL GRINDERS**

31	Type CFA	18"	\$1480.00	C
	Type HGA	20"	1575.00	C
	Type JSA	24"	1995.00	C
	Type JTA	24"	2090.00	C
	For other than 50 or 60 cycles, increase price 10%			
	Type CF	18"	Price on Application	C
	Type HG	20"	Price on Application	C
	Type JS	24"	Price on Application	C
	Type JT	24"	Price on Application	C
	Wheel Dresser			\$45.00 C
	10 inch bore flanges (set 4)			95.00 C
	12 inch bore flanges (set 4)			115.00 C

**THREE SPEED SNAGGING GRINDERS**

32	Type BAA	18"	\$2275.00	D
	Type BCA	20"	2355.00	D
	Type BGA	24"	2400.00	D
	10 inch bore flanges (set 4)		95.00	C
	12 inch bore flanges (set 4)		115.00	C
	Direct Current and odd cycles Alternating Current, prices on application.			

**VARIABLE SPEED SNAGGING GRINDERS**

33	Type VBKA	24"	(DISCONTINUED)	
	Type VBMA	30"	(DISCONTINUED)	
	10 inch bore flanges (set 4)		(DISCONTINUED)	
	12 inch bore flanges (set 4)		(DISCONTINUED)	

**COMBINATION SINGLE END DISC GRINDERS**

34	Type FHAC	½ H.P.	\$436.00	B
	Type FOAC	1 H.P.	550.00	B
	Type HTAC	2 H.P.	680.00	C
	Type HCAC	3 H.P.	770.00	C
	Type HEAC	5 H.P.	950.00	C
	Type FSAC	7½ H.P.	1250.00	C
	For other than 50 or 60 cycles, increase price 10%			
	Type FOC	1 H.P.	Price on Application	B
	Type HTC	2 H.P.	Price on Application	C
	Type HCC	3 H.P.	Price on Application	C
	Type HEC	5 H.P.	Price on Application	C
	Type FSC	7½ H.P.	Price on Application	C

**DOUBLE END DISC GRINDERS**

35	Type HTAD	2 H.P.	\$850.00	C
	Type HCAD	3 H.P.	905.00	C
	Type HEAD	5 H.P.	1075.00	C
	Type FSAD	7½ H.P.	1450.00	C
	For other than 50 or 60 cycles, increase price 10%			
	Type HTD	2 H.P.	Price on Application	C
	Type HCD	3 H.P.	Price on Application	C
	Type HED	5 H.P.	Price on Application	C
	Type FSD	7½ H.P.	Price on Application	C

**PEDESTAL BUFFERS**

36	Type DHA	¾ H.P.	\$244.00	A
	Type DRA	1 H.P.	350.00	B
	For other than 50 or 60 cycles, increase price 15%			
	For ¾ H.P. bench type, deduct \$29.00; for 1 H.P., \$44.00.			
37	Type DTA	2 H.P.	\$490.00	C
	Type DVA	3 H.P.	555.00	C
	Type DFA	5 H.P.	640.00	C
	Type DSA	7½ H.P.	835.00	C
	For other than 50 or 60 cycles, increase price 15%			

**PEDESTAL BUFFERS (cont.)**

	Type DT	2 H.P.	Price on Application	C
	Type DV	3 H.P.	Price on Application	C
	Type DF	5 H.P.	Price on Application	C
	Type DS	7½ H.P.	Price on Application	C
38	Type DKA	2 H.P.	\$485.00	C
	Type DLA	3 H.P.	545.00	C
	Type DMA	5 H.P.	585.00	C
	For other than 50 or 60 cycles, increase price 15%			
	Type DK	2 H.P.	Price on Application	C
	Type DL	3 H.P.	Price on Application	C
	Type DM	5 H.P.	Price on Application	C

**VEE BELT BUFFERS**

39	Type COA	3 H.P.	Single Motor	\$1001.00	C
	Type EOA	5 H.P.	Single Motor	1046.00	C
	Type GOA	7½ H.P.	Single Motor	1180.00	C
	Type HOA	10 H.P.	Single Motor	1300.00	C
	Type LOA	15 H.P.	Single Motor	1576.00	C
	Type DOA	3 H.P.	Double Motor	1420.00	C
	Type MOA	5 H.P.	Double Motor	1470.00	C
	Type NOA	7½ H.P.	Double Motor	1750.00	C
	Type SOA	10 H.P.	Double Motor	1995.00	C

For "A" dimension 17", add \$81.00 to above prices.

For other than 50 or 60 cycles and Direct Current, prices on application.

**WET ABRASIVE CUT-OFF MACHINES**

40-41	Type JCAW	7½ H.P.	\$2050.00	D
	Type JCW	7½ H.P.	Price on Application	D

**TOOL POST GRINDERS**

42	Type PA	¼ H.P.	\$130.00	B
	Type PHA	½ H.P.	190.00	B
	Type POA	1 H.P.	275.00	B
	For other than 50 or 60 cycles, increase price 15%			
	Type P	¼ H.P.	175.00	B
43	Type SA	¼ H.P.	165.00	B
	Type SSA	½ H.P.	230.00	B
	For other than 50 or 60 cycles, increase price 15%			
	Type S	¼ H.P.	215.00	B
	Extension Mandrel with Wheel for ¼ H.P.		7.00	B
	Extension Mandrel with Wheel for ½ H.P.		8.00	B
	Tooth Rest for ¼ H.P.		4.50	B
	Tooth Rest for ½ H.P.		4.75	B
	Mandrel and Tooth Rest for 1 H.P. — Price on Application.			

**UNIVERSAL MOTOR TOOL POST GRINDERS**

44	Type FU	¼ H.P.	\$165.00	B
	Type LU	½ H.P.	150.00	B
	Type LBU	¾ H.P.	150.00	B

**ANGLE PLATE GRINDERS**

45	Type TPA	¼ H.P.	\$167.00	B
	Type TA	½ H.P.	253.00	B
	Type TTA	1 H.P.	366.00	B
	Type TVA	2 H.P.	523.00	C
	Type TFA	3 H.P.	565.00	C
	For other than 50 or 60 cycles, increase price 15%			

**AIR MASTERS**

46	Type AIR 1—	¼ H.P.	\$230.00	C
	Type AIR 2—	¾ H.P.	283.00	C
	Type AIR 3—	1½ H.P.	435.00	C
	Piping, per set (except cabinet type machines) 17.00 Net			
	Adjustable hood, each \$ 32.00 C			
47	Type AIR-2C		\$385.00	C
	Type AIR-C		472.00	C
	Type AIR-4C		795.00	C
	Piping for above (Price on Application)			

In ordering hoods, give diameter and face of buffing wheels to be used, also height from floor to center of buffing spindle.